

20020715.qrp v02_n617.qrl.20020715

Date: Mon, 15 Jul 2002 19:03:10 EDT
From: qrp-l@Lehigh.EDU
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: QRP-L digest 2617

QRP-L Digest 2617

Topics covered in this issue include:

- 1) [129751] Re: another schematic capture question
by "Leon Heller" <leon_heller@hotmail.com>
- 2) [129752] Is direct conversion fm a contradiction in terms?
by lenny wintfeld <w2bvh@comcast.net>
- 3) [129753] FS: Meade Telescope
by NV9Z@aol.com
- 4) [129754] OT: HT Battery Supplier Comments PSE
by "Brian P. Mileschosky" <n5zgt@swcp.com>
- 5) [129755] Contest: ARCI HB Sprint - K7RE
by Brian Kassel <bkassel@mato.com>
- 6) [129756] Re: HT Battery Supplier Comments PSE
by "Mike Yetsko" <myetsko@insydesw.com>
- 7) [129757] Re: OT: HT Battery Supplier Comments PSE
by "Karl F. Larsen" <k5di@zianet.com>
- 8) [129758] RE: Experiment of reproducible results PART II
by Nick Kennedy <nkennedy@tcainternet.com>
- 9) [129759] Re: Is direct conversion fm a contradiction in terms?
by David Hinerman <WD8CIV@worldnet.att.net>
- 10) [129760] This Week's Best Post to QRP-L
by W2SH@aol.com
- 11) [129761] Contest: ARCI HB Sprint - AL7FS, also first K2 contact for me.
by Jim Larsen - AL7FS <AL7FS@arrl.net>
- 12) [129762] Re: Contest: ARCI HB Sprint - K7RE
by "Rod N0RC" <rod@n0rc.us>
- 13) [129763] QRV in 7030-40
by "Juan A. Bertolin" <ea5xq@qsl.net>
- 14) [129764] Re: Contest: ARCI HB Sprint
by "ALAN KAUL" <alan.kaul@worldnet.att.net>
- 15) [129765] Re: Antennas, Transmission lines, Power and SWR
by George Gingell <k3tks@u1.abs.net>
- 16) [129766] Re: Crystals and Filters
by George Gingell <k3tks@u1.abs.net>
- 17) [129767] Re: Experiment of reproducible results PART II
by "George, W5YR" <w5yr@att.net>
- 18) [129768] Re: Antennas, Transmission lines, Power and SWR
by "George, W5YR" <w5yr@att.net>
- 19) [129769] Re: Is direct conversion fm a contradiction in terms?

- by "Leon Heller" <leon_heller@hotmail.com>
- 20) [129770] Re: OT: HT Battery Supplier Comments PSE
by "Leon Heller" <leon_heller@hotmail.com>
- 21) [129771] Re: OT: HT Battery Supplier Comments PSE
by "Richard Brummer, K2JQ" <k2jq@rcn.com>
- 22) [129772] Modulation modes
by "Karl F. Larsen" <k5di@zianet.com>
- 23) [129773] Re: Modulation modes
by "George, W5YR" <w5yr@att.net>
- 24) [129774] Re: Modulation modes
by Jake Brodsky <frussle@erols.com>
- 25) [129775] Re: Modulation modes
by "Karl F. Larsen" <k5di@zianet.com>
- 26) [129776] Re: Modulation modes
by W2AGN <w2agn@w2agn.net>
- 27) [129777] Re: Modulation modes
by "George, W5YR" <w5yr@att.net>
- 28) [129778] Re: Is direct conversion fm a contradiction in terms?
by brickle <brickle@pobox.com>
- 29) [129779] Re: Next step beyond Altoids?
by Tom Busch <tomb@kiva.net>
- 30) [129780] Re: OT: HT Battery Supplier Comments PSE
by "Walt Amos" <k8cv@netzero.net>
- 31) [129781] Rocky Mountain Rock-mite EARLY SPY PHOTOS!!!
by "Rod NØRC" <rod@n0rc.us>
- 32) [129782] Re: Rocky Mountain Rock-mite EARLY SPY PHOTOS!!!
by "William K. Harding" <k4ahk@ix.netcom.com>
- 33) [129783] RE: Zack Lau DC tribander
by "Hare,Ed, W1RFI" <w1rfi@arrl.org>
- 34) [129784] Re: Modulation modes
by "Karl F. Larsen" <k5di@zianet.com>
- 35) [129785] RE: Modulation modes
by Karl Kanalz <kkanalz@gcecis.com>
- 36) [129786] Re: Rocky Mountain Rock-mite EARLY SPY PHOTOS!!!
by Jim Cluett <w1pid@yahoo.com>
- 37) [129787] Re: Rocky Mountain Rock-mite EARLY SPY PHOTOS!!!
by "Dave Benson" <nn1g@earthlink.net>
- 38) [129788] The Rock-Mite "L" Factor
by "Bill Jones" <kd7s@psnw.com>
- 39) [129789] Re: Modulation modes
by "Ian Wilson" <ianmwilson@earthlink.net>
- 40) [129790] Re: The Rock-Mite "L" Factor
by "Richard Brummer, K2JQ" <k2jq@rcn.com>
- 41) [129791] Re: "Dipping" traps
by Bill Coleman <aa4lr@arrl.net>
- 42) [129792] RE: The Rock-Mite "L" Factor
by "Fancher, Mark (GEAE)" <Mark.Fancher@ae.ge.com>
- 43) [129793] RE: "Dipping" traps

by "Tracy Markham" <tracy@bytemark.com>

44) [129794] Wed, July 17 - Tailgate Sale
by David Gauding <david.gauding@bbs.galilei.com>

45) [129795] Re: Rocky Mountain Rock-mite EARLY SPY PHOTOS!!!
by "William K. Harding" <k4ahk@ix.netcom.com>

46) [129796] twin-lead J-pole?
by "Steve Blatman" <steve@inkspot.net>

47) [129797] Zack Lau DC tribander and Ugly Weekender
by "Juanjo Pastor" <ec5aca@wanadoo.es>

48) [129798] Re: twin-lead J-pole?
by Timothy-Allen Albertson-KG6IRH <kg6irh@pacbell.net>

49) [129799] Re: twin-lead J-pole?
by "Dale Mason" <dmason@softconnect.net>

50) [129800] Re: twin-lead J-pole?
by David Hinerman <WD8CIV@worldnet.att.net>

51) [129801] An antenna question
by <igeq100@iupui.edu>

52) [129802] Wanted: RIT kit for SW-xx+ series
by Fred Bonavita <k5qlf@yahoo.com>

53) [129803] Rocky Mountain Rock Mite and Tales of the Rail Road
by "Walt Amos" <k8cv@netzero.net>

54) [129804] Need Portable "Atomic" Clock
by "James P. Rybak" <jrybak@mesastate.edu>

55) [129805] Re: Need Portable "Atomic" Clock
by <igeq100@iupui.edu>

56) [129806] Re: Need Portable "Atomic" Clock
by "Rod N0RC" <rod@n0rc.us>

57) [129807] RE: Rocky Mountain Rock Mite and Tales of the Rail
Road
by "Randall" <Firefox67501@cox.net>

58) [129808] carrying case for 259B
by "Gene Sailsbury" <gsailsbury@mobil1.net>

59) [129809] Re: Rocky Mountain Rock Mite and Tales of the Rail
Road
by W2AGN <w2agn@w2agn.net>

60) [129810] Re: Need Portable "Atomic" Clock
by "Steve Lawrence" <Steve.Lawrence@itwfeg.com>

61) [129811] Re: The Rock-Mite "L" Factor
by "Dave Benson" <nn1g@earthlink.net>

62) [129812] Re: another schematic capture question
by Steven Weber <kd1jv@moose.ncia.net>

63) [129813] AAPB - smt practice kit II?
by Steven Weber <kd1jv@moose.ncia.net>

64) [129814] Re: Need Portable "Atomic" Clock
by "Karl F. Larsen" <k5di@zianet.com>

65) [129815] Re: The Rock-Mite "L" Factor
by David Hinerman <WD8CIV@worldnet.att.net>

66) [129816] Fwd: WWV-Message

by Ed Tanton <n4xy@earthlink.net>
67) [129817] Re: Is direct conversion fm a contradiction in terms?
by lenny wintfeld <w2bvh@comcast.net>
68) [129818] Baygen Free-Play clone \$20
by Chris Cartwright <ccart@phideaux.com>
69) [129819] Re: twin-lead J-pole?
by Lew Paceley <lew@paceley.com>
70) [129820] K2 update: 60 meters and low-level transverter I/O
by Wayne Burdick <n6kr@elecraft.com>
71) [129821] Micro-80 trcvr kits
by "Oleg V. Borodin" <master72@lipetsk.ru>
72) [129822] Major X3 Flare 7-15
by na5n@zianet.com

Date: Sun, 14 Jul 2002 23:16:19 +0000
From: "Leon Heller" <leon_heller@hotmail.com>
To: harold.smith1@worldnet.att.net, qrp-1@lehigh.edu
Subject: [129751] Re: another schematic capture question
Message-ID: <F180uMC3eVhakgbTMoZ00013df8@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

>From: "Harold Smith" <harold.smith1@worldnet.att.net>
>Reply-To: harold.smith1@worldnet.att.net
>To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
>Subject: another schematic capture question
>Date: Sun, 14 Jul 2002 16:36:55 -0500
>
>Gentlefolk,
>
>The question earlier about the schematic capture brought up one of my own:
>Does anyone know of a schematic capture program that can generate legible
>output in a format that can be directly pasted into a Word or similar
>document?

I get reasonable results by capturing the screen with the PrtSc key, or a screen capture program, pasting the image into Paint and saving it as a GIF. It can then be inserted into a Word doc. or a web page, and is usually acceptable.

73, Leon

--

Leon Heller, G1HSM Tel: +44 1327 359058 Email:leon_heller@hotmail.com

My web page: http://www.geocities.com/leon_heller
My low-cost Altera Flex design kit: <http://www.leonheller.com>

Join the world s largest e-mail service with MSN Hotmail.
<http://www.hotmail.com>

Date: Sun, 14 Jul 2002 20:20:09 -0400
From: lenny wintfeld <w2bvh@comcast.net>
To: "[Low Power Amateur Radio Discussion]" <qrp-1@lehigh.edu>
Subject: [129752] Is direct conversion fm a contradiction in terms?
Message-ID: <3D321539.61090005@comcast.net>
MIME-version: 1.0
Content-type: text/plain; charset=us-ascii
Content-transfer-encoding: 7BIT

Is it possible to detect fm at baseband? Is it practical?

73,

Lenny W2BVH

Date: Sun, 14 Jul 2002 20:21:28 EDT
From: NV9Z@aol.com
To: qrp-1@lehigh.edu
Subject: [129753] FS: Meade Telescope
Message-ID: <bb.22ef168e.2a636f88@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Hi QRPers!

I am listing this for a non-Ham (and fellow Volunteer Firefighter) friend of mine, who is the waiting list for a kidney transplant.

Meade ETX-60AT Telescope with Fork Mount and 9 speed motor drive system.

#494 AutoStar computer controller with 1200 object data base. Modified 9 mm and 25 mm Achromatic eye pieces. Instruction manual included. Used only one time. He bought it new for \$300.00 in 2001. Price is \$200.00 shipped CONUS. Please email me off list at NV9Z@aol.com.

Thanks and very 72!

Chris Blaase NV9Z QRP-L #2370 QRP-ARCI #11172
Hagerstown IN

Date: Sun, 14 Jul 2002 18:43:54 -0600
From: "Brian P. Mileschosky" <n5zgt@swcp.com>
To: <qrp-l@lehigh.edu>
Subject: [129754] OT: HT Battery Supplier Comments PSE
Message-ID: <003701c22b98\$b66b3da0\$e104b8d8@hlw11>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi All,

Sorry for the off-topic post, but I figured some of you might be experienced with replacing original battery packs for HTs.

I have a Yaesu FT-416 2-meter HT (gray version) and an FT-530, both of which use the same battery packs. I am looking to replace their original NiCd FNB-25 (7.2-volt, 600-mAh) and FNB-27 (12-volt, 900-mAh) packs since they are beginning to lose their charge. I think I will replace them with NiMH packs.

Which after-market battery company (out of many) is the best to deal with, in terms of good product, reliability, and 'fit' (I've heard some after-market packs do not quite physically fit the HT they are meant for)? I have seen MAHA, Sarrio.com, criticalbattery.com, NiCd Lady, and others out there. MAHA is the one I've heard most of, and the rest were found with a search on the 'net.

I'm interested in your experiences and recommendations. Please response **privately.** I appreciate it!

72,
Brian, N5ZGT

Amateur Radio Station N5ZGT - N5ZGT PBBS, 145.01 MHz

ARRL Life Member, NorCal #1700 QRP-L #580 AK/QRP #125

Boy Scouts of America - Eagle Scout 12/6/96 - ASM, Troop 85
Vigil Honor Member, O.A. Lodge 66 Yah-Tah-Hey-Si-Kess

Please visit my site at <http://www.unm.edu/~brianm>

Date: Sun, 14 Jul 2002 17:49:40 -0700
From: Brian Kassel <bkassel@mato.com>
To: qrp-l@lehigh.edu
Subject: [129755] Contest: ARCI HB Sprint - K7RE
Message-ID: <3D321C24.ED5A28BF@mato.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi Folks:

If future contests are this much fun from this new QTH, I think that I am really going to enjoy it here in Spearfish. I ran my K-2 at 5W into a Horizontal 80 loop at between 20 to 30 Ft. Logging program was QRPDUPE of course. ;) I miss my beams, but time will allow me to get them back up before the snow flies.

Worked Randy K7TQ on 15, 20 and 40M. Got AK on 20M as well as 15M too. One high point was working, in consecutive order: N0UR Jim, who gave me a very nice warm welcome to the midwest, followed by HI (KH6B), then AK (AL7FS), then DE (K3CHP), then SC, which is also fairly rare. A real kicker was to work NN7T who said that he wasn't in the contest, but that he was coming to the Sturgis motor cycle rally in a few weeks. For the unknowing, that event increases the population of Sturgis from below 10,000 to well over 125,00 for one week or more! Not too shabby to have these places on and operating in a 4 hour contest. Thanks to all who made it possible for us to have so much fun. legally ;). I want to especially thank Randy Foltz, for his years of effort that he has put into these events.

Exchanged Information: K7RE 559 SD 3623

Hours of Operation:____4.0____ Hours.

Band	QSOs	Points	Mult's
160	0	0	0
80	0	0	0
40	4	20	4
20	66	275	38
15	13	62	14
10	0	0	0
6	0	0	0
2	0	0	0
Totals	83	357	56

TX Power Code = 7; My member number = 3623;

357 QSO Points X 56 Multipliers X 7 Power Multiplier = 139,944

Rig: Elecraft K-2 at 5 W on 3 bands 3X 5,000 = 15,000

139,944 + 15,000 = 154,944

Total Score: 154,944 Claimed Points

Date: Sun, 14 Jul 2002 20:58:34 -0400
From: "Mike Yetsko" <myetsko@insydesw.com>
To: <n5zgt@swcp.com>,
"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>,
Subject: [129756] Re: HT Battery Supplier Comments PSE
Message-ID: <004a01c22b9b\$1e6d4cc0\$0300a8c0@charter.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

----- Original Message -----

From: "Brian P. Mileschosky" <n5zgt@swcp.com>
Subject: OT: HT Battery Supplier Comments PSE

> I have a Yaesu FT-416 2-meter HT (gray version) and an FT-530, both
of
> which use the same battery packs. I am looking to replace their
original
> NiCd FNB-25 (7.2-volt, 600-mAh) and FNB-27 (12-volt, 900-mAh) packs
since
> they are beginning to lose their charge. I think I will replace them
with

> NiMH packs.

I've had excellent results with Mr. NiCad, also known as E H Yost. They sell batteries, packs, inserts, whatever. And you can get them in various ratings.

I needed a pack for an old u4-AT that the pack just wore out. Called them up. Do you want the standard pack, the high output pack, the higher output pack? They all fit in the existing stock shell. Or they had two even higher rated packs but they had to be 'machined' into the shell. I ordered the biggest mah rating the girl on the phone said would fit into the 'stock' shell without mods. And when it arrived, sure enough, it was a easy drop-in. Well, I really shouldn't say easy. It WAS a very tight fit, but I didn't have to do any 'mods' to get it in there.

I just checked, their web page is at:

<http://www.mrnicd-ehyostco.com/>

Mike

Date: Sun, 14 Jul 2002 19:15:18 -0600 (MDT)
From: "Karl F. Larsen" <k5di@zianet.com>
To: "Brian P. Mileschosky" <n5zgt@swcp.com>
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [129757] Re: OT: HT Battery Supplier Comments PSE
Message-ID: <Pine.LNX.4.44.0207141912020.4193-1000000@Daisy.dog>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Also try E. H. Yoest Co. 608 831-3443 and be ready to tell them your radio type. My ADI HT-204 has a wierd battery size and Yost was able to find a 7.2 volt 1.5 amp-hour battery that fits Standard radios and almost mine...:-) Just a tad off center.

On Sun, 14 Jul 2002, Brian P. Mileschosky wrote:

> Hi All,

>

> Sorry for the off-topic post, but I figured some of you might be
> experienced with replacing original battery packs for HTs.

>
> I have a Yaesu FT-416 2-meter HT (gray version) and an FT-530, both of
> which use the same battery packs. I am looking to replace their original
> NiCd FNB-25 (7.2-volt, 600-mAh) and FNB-27 (12-volt, 900-mAh) packs since
> they are beginning to lose their charge. I think I will replace them with
> NiMH packs.
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> with, in terms of good product, reliability, and 'fit' (I've heard some
> after-market packs do not quite physically fit the HT they are meant for)?
> I have seen MAHA, Sarrio.com, criticalbattery.com, NiCd Lady, and others out
> there. MAHA is the one I've heard most of, and the rest were found with a
> search on the 'net'.
>
> I'm interested in your experiences and recommendations. Please response
> **privately.** I appreciate it!
>
> 72,
> Brian, N5ZGT
>
> -----
> Amateur Radio Station N5ZGT - N5ZGT PBBS, 145.01 MHz
> ARRL Life Member, NorCal #1700 QRP-L #580 AK/QRP #125
>
> Boy Scouts of America - Eagle Scout 12/6/96 - ASM, Troop 85
> Vigil Honor Member, O.A. Lodge 66 Yah-Tah-Hey-Si-Kess
>
> Please visit my site at <http://www.unm.edu/~brianm>
> -----
>
>
>

--

Yours Truly,

- Karl F. Larsen, (505) 524-3303 -

Date: Mon, 15 Jul 2002 20:13:57 -0500
From: Nick Kennedy <nkennedy@tcainternet.com>
To: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [129758] RE: Experiment of reproducible results PART II
Message-ID: <01C22C3C.26D8D680.nkennedy@tcainternet.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

Whoa--looks like missed out on a good one by being on a canoe trip (my first) this weekend. But I'll pitch in my 0.02 Euros worth anyway--my small contribution to The Discussion That Can Never End.

On what matching does for you--I don't necessarily agree that it allows the TX to give its Maximum Output. I think Rated Output would be more like it. Reason--you're not necessarily matching the source resistance when you provide the desired 50 ohm load. I think we've discussed this and sort of agreed on it before.

On mismatches caused by measurements ... I agree that you can't measure anything without disturbing it a bit; and that SWR meters are going to introduce a small mismatch, but it's still hard to believe that this is the cause of the big bad discrepancies some people are reporting. Unless the meter design is really poor.

Let's see--I'm right now trying my MFJ-259B into a 50 ohm BNC terminator--SWR at 21 MHz is 1.0 to 1. Now shooting thru my homebrew W7EL wattmeter / SWR meter at 21 MHz to the same load, SWR is 1.1 to 1. OK it had an effect, but it's not huge. And I freely admit that my construction techniques on this SWR meter weren't the best.

Concerning the original issue on Reproducible Results Part I (if I remember correctly)--the SWR would jump up when power was reduced. I used to see that on some rigs I owned previously. My theory (not too rigorous scientifically) was that the amplifier liked to go into oscillation, but sufficient drive would swamp or otherwise overwhelm that tendency.

Reducing drive below a critical value would allow the evil spirits to come to the fore? What do the text books say about that one?

72--Nick, WA5BDU

Date: Sun, 14 Jul 2002 21:40:49 -0400
From: David Hinerman <WD8CIV@worldnet.att.net>
To: qrp-l@lehigh.edu
Subject: [129759] Re: Is direct conversion fm a contradiction in terms?
Message-ID: <5.1.0.14.1.20020714212228.00b3c330@postoffice.worldnet.att.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

At 08:20 PM 7/14/2002 -0400, you wrote:

>Is it possible to detect fm at baseband? Is it practical?

>

> 73,

>

> Lenny W2BVH

Lenny,

Yes, it's possible, but most FM detectors don't provide any selectivity to speak of. The quadrature detector, which is one of the most inexpensive and common FM detectors in consumer FM receivers, provides little selectivity. The control voltage of a PLL locked to an input signal will follow any frequency modulation, but it's not all that selective either. Both of these benefit from prior filtering and amplification (and limiting).

Making a tunable amplifier chain with good enough selectivity for most radio applications is a real challenge. That's why superhets are more common. For a single-frequency receiver it might be feasible, though.

Have you got something in mind?

Dave

"You can fool some of the people all of the time. That's enough to make a living." - Lance Burton

Dave Hinerman
WD8CIV@att.net

Date: Sun, 14 Jul 2002 22:00:20 EDT
From: W2SH@aol.com
To: qrp-l@lehigh.edu
Cc: k7fd@hotmail.com
Subject: [129760] This Week's Best Post to QRP-L
Message-ID: <ba.28d3d9da.2a6386b4@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

With reference to TenTec's long-rumored but little-disclosed QRP rig, K7FD's rejoinder:

>>Did Dolly Parton inspire the two big knobs?<<

Thanks, John. Maybe 'twas OT, but for this OT (or OF, or whatever), I loved it.

tnx agn,

Charles, W2SH

Date: Sun, 14 Jul 2002 18:14:36 -0800
From: Jim Larsen - AL7FS <AL7FS@arrl.net>
To: "qrp-l@lehigh.edu" <qrp-l@lehigh.edu>
Subject: [129761] Contest: ARCI HB Sprint - AL7FS, also first K2 contact for me.
Message-ID: <3D32300C.51B6DA7D@ARRL.NET>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Greetings from Alaska,

I think it was only fitting that the "beacon from South Dakota", K7RE, should be the first QSO for me on my new Elecraft K2. Thanks Brian. You were a beacon from your old QTH and you are keeping up that tradition from the new one...all without the beams. Wow.

This was the very first day on the air with the K2 and I can see I have a lot to learn about how to use it. Reverse CW worked the best for me with lower, more mellow tones. The regular CW position was too harsh with too many high tones. Could be I need to tweak the filters or something. As it stands I will not be using the regular CW position at all.

I operated on both 20 and 15 meters. States worked ran from BC, OR, ID, UT, to SD, WI, to KY, to ME and also from FL, SC to TX to AZ to CA. I even worked WL7CDC, my friend Doug here in Anchorage. Thanks everyone for the contacts.

Conditions were not really all that good in spite of what you see for state count. For example, TX popped in for a fairly short time and faded right back out again. This regional jumping around of the propagation seemed to happen all afternoon and was more the rule than the exception. QSB up...contact...QSB down and gone for the day. Only a handful of stations had strong signals.

I managed 20 QSOs in all but was very relaxed about it. I was coming and going from the shack to do stuff with my daughter and probably worked about 2 hours or a little more.. Of course now I have to do the scoring. I don't use a logging program so manual preparation will have

to do.

The sprint was lots of fun and I will need to do more of them. If you missed this one, then try for sure to make the next.

73, Jim

--

Jim Larsen, AL7FS, Anchorage, Alaska
(BP51cc) - 61.101 North, 149.824 West
ex-WA0LPK AK-QRP#003 SOC#003 10-X-#12094
mailto:al7fs@arrl.net - <http://www.qsl.net/al7fs/>

Date: Sun, 14 Jul 2002 20:41:27 -0600
From: "Rod N0RC" <rod@n0rc.us>
To: <bkassel@mato.com>,
"Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [129762] Re: Contest: ARCI HB Sprint - K7RE
Message-ID: <000d01c22ba9\$1ed6dba0\$6501a8c0@greyrock>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Congrats Brian,

Welcome to the Midwest, glad I could make the log (40m) in your first(?) SD contest. Actually I was happy just to be heard, I was only fooling around today, and had the power cranked down to about 400mW!!!

73, Rod N0RC

----- Original Message -----

From: "Brian Kassel" <bkassel@mato.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Sunday, July 14, 2002 6:49 PM
Subject: Contest: ARCI HB Sprint - K7RE

> Hi Folks:

>

> If future contests are this much fun from this new

Date: Sun, 14 Jul 2002 19:22:52 -0900
From: "Juan A. Bertolin" <ea5xq@qsl.net>
To: QRP - LIST ADDRESS <qrp-l@lehigh.edu>,
GQRP - LIST ADDRESS <GQRP@yahoo.com>
Subject: [129763] QRV in 7030-40
Message-ID: <3D324E1C.4465155@qsl.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi,

During the next months I will be QRV around 7030-7040 as XE2/EA5XQ/QRP.

Usually: between 3.00-6.00UTC
Rigs: GQ40 Sheldon 5W
Antenna: V Inverted for 40m.
QTH: Monterrey, LOC: DL95to

For the time being I have contacted with

MONOPOLE ANTENNA with 300ohms wire
=====

K5KZQ	MYRST: 449
WA6URY	MYRST: 459

V INVERTED for 40m with 300hms wire
=====

W1AW/5	MYRST: 599
K3KD/M	MYRST: 579

I will appreciate if some on you knows the email addresses of these guys in order to chat with them the features of the QS0, stability of the signal, quality of signal, comments....

Thanks and I am looking forward to contact with you

73s Juan

--

=====

EA5XQ, QRA:Juan, QTH:Almazora, LOC:IM99XW
Clubs: URE, G-QRP #9805, QRP-L #1461, EA-QRP #471
@@
Web Site: <http://www.qsl.net/ea5xq> (english version in

<http://www.qsl.net/ea5xq/Indexeng.html>)

Date: Mon, 15 Jul 2002 04:18:56 -0700
From: "ALAN KAUL" <alan.kaul@worldnet.att.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [129764] Re: Contest: ARCI HB Sprint
Message-ID: <003701c22bf1\$73d13b80\$56e2480c@oemcomputer>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

It was my most unusual sprint --- operating an FT-817 with FIVE WATTS from the 20th floor of the Grand America Hotel in Salt Lake City. I came up Friday on business with a suitcase full of wires, etc., so it was a little like Field Day around here Friday night!

I decided to enter the sprint, after finishing the IARU/WRTC and concluding that I had gone to too much work installing wire antennas for 20 and 15 off my balcony..... not getting into the sprint would be a waste of perfectly good dipoles (which seemed, at times, to behave like dummy loads)!!!

Although, I called CQ a lot on 15 -- I didn't get a single call on that band---all my Q's were on 20. There was QSB and QRN, and what amazes me is the stations I worked were within 2-3 kHz of each other (and sometimes QRM-ing, each other)

I only worked 13 stations in 10 SPC's including AZ, FL, ID, MI, MN, NM, OR, SD, TX and BC and the Canadian contact -- VE7SL -- was running a Tuna Tin on 20! My point total was 590 with no bonuses.....(as scored by TR-log --- I presume it is correct!).

I nabbed some of the regulars -- NQ7X, N0UR and K7RE. But missed some of the others.

72/73 de alan W6RCL/7

Date: Mon, 15 Jul 2002 00:03:23 -0400 (EDT)

From: George Gingell <k3tks@u1.abs.net>
To: QRP List <qrp-l@lehigh.edu>
Subject: [129765] Re: Antennas, Transmission lines, Power and SWR
Message-ID: <20020714233736.M91869-100000@u1.abs.net>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

O.K. That is not the Original Subject line, But never the less, the topic is generally the same.

We have just had one of the Best Tutorials on the Subject by Dave and George that has been seen here in quite a long time.

Sure a pleasant read as compared to the often Off Topic material that we were starting to get used to around here.

While, I found it both educational and enlightening, One other aspect of the subject has been overlooked. IMHO.

That is Simply, that many of us would rather prefer the more practical aspects of "Hosing it up" (Nil's) and making it work.

A couple of quick examples, if you will...

First Connect the Rig to the Dipole and Tune (More precisely, "Prune") for Maximum Output (Lowest SWR). Then REMOVE all unnecessary Tuning indicators and Adapters. Remember each one is a small bit of LOSS.

LESS LOSS IS BETTER. Simple? Yes!

Second Thought is use the BEST SWR/PWR Indicator and ATU that you can Afford. Yes there is a BIG Difference in Many of them.

Some where (Under Lock and Key) in my basement is a WELZ RP-20, A now extinct, but still quite valuable PWR/SWR Meter. It is my "Official QRP Ref. Standard although there is at least one other currently available that is in the same Class. Check Oak Hills Research (Morsex.com) for more details.

I also recommend removal from the connection piping scheme after tuning is achieved.

As for the Tuner, There are a Wide Variety of Good Ones Available to us today. Still a matter of Efficiency is important here in particular.

This is a case of "Bigger IS Better". Johnson Viking Matchbox is preferred Model, but I also have an MFJ that I like quite well for QRPP.

I have several others in various Stages of Construction, and look forward to the day that I can find time to complete them.

There have been some Outstanding designs here in the World of QRP in recent years.

I onnce asked Mike, W3TS how he was so successful with QRPP in contests.

The Secret? " Careful Tuning and Setup of Antenna, then Remove all unneeded equipment and connectors"

Basically "K.I.S.S" and "Play".

Thanks again George and Dave for the interesting topic of the month.

QRPP Dx Tu, (C) 2002 K3TKS

Sir George, The First :^}

72 ES QRP DX TU (C) 1986, G. "Danny" Gingell, K3TKS@ abs.net
Former QRP A.R.C.I. Net Manager and CURRENT Board of Director Member.
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George D. Gingell, Jr. 3052 Fairland Road, Silver Spring, MD 20904-7117
Maryland Milliwatt Club QRP Reference Library, (301) 572-6789 IQRR #1,
Maryland Milliwatt Club Founder and Trustee of Club Station - WQ3RP -
Grid Square FM19mb 76.94 W - 39.06 N Silver Spring, MD 20904 QRPea.A.

Collector of Quartz Crystals and Telegraph Keys.

Maryland Milliwatt Club QRP Reference Library, Donations Accepted.

"72" = "Wishing You Good QRP" (C) 1991 Oleg Borodin, RV3GM

Date: Mon, 15 Jul 2002 00:41:10 -0400 (EDT)
From: George Gingell <k3tks@u1.abs.net>
To: QRP List <qrp-l@lehigh.edu>

Cc: Jeff K8GD <jhecht@dnaco.net>,
"Dave (Red Hot Radio) Fifield" <dave@redhotradio.com>,
Subject: [129766] Re: Crystals and Filters
Message-ID: <20020715000331.N91869-100000@u1.abs.net>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi Jeff,

I just thought that I would add a couple of quick comments on the Bad Crystal Filter on the "Manhattan RH20 Project".

It is obvious from your fix that the problem was either a bad Crystal or a mismatched Set.

First, I would Recommend to any and all who are thinking of making one to "JUMP on the Offer by Dave Fifield, AD6A" for a Ready Matched Set of Rocks for the Project. You have to buy quite a few 'ROCKS' to make up a really good filter.

For those who are "Brave and Fearless" I still recommend reading up on the techniques offered by Jim Kortge, K8IQY on "How to Match Crystals and Build Crystal Filters" That may not have been the exact topic of his Talk at Atlanticon 2002, but He sure did provide some eye opening insights in his brief tutorial on the subject.

While I have not yet purchased his Precision Variable Crystal Oscillator Kit, YET! I will put it on the Must Have Test Equipment List for anyone serious about Learning to build Crystal Filters. The Kit is currently available at one of my favorite QRP Candy Stores, The NJ-QRP Club.

<www.njqrp.org/pvxo> \$ 60.00 Postpaid (DX + \$ 8)

Check of MO's payable to "George Heron, N2APB" and send to George Heron, N2APB
2419 Feather Mae Court, Forest Hill, MD 21050.

or Order via PayPal to <n2apb@amsat.org>

I understand that the Companion Test Jig Assembly will be available later from NJ-QRP Club also.

OBTW Atlanticon 2002 Proceedings are also still available from NJ-QRP.

I also Collect Crystals, so I am naturally interested in anything that

helps check them out. :^}

Yes, I saw the offer of all those GE Rocks yesterday, I would have bought them all, but we are in a cash flow crunch right now. :^}

I thought seriously of Offering My Palm Vx in trade for the K1 Today. :^}

Then I would not have anything for the NK0E Serial Sender Kit (\$ 34.00)

also available from N2APB-INC. :^}

O.K. One Last Shameless Plug . If you are a QRPer that has any interest in Homebrewing, You Absolutely MUST SUBSCRIBE to the "QRP HOMEBREWER" a mere \$ 15.00 per year (DX \$ 20) and Worth every Red Cent.

No I don't own any Stock in NJ-QRP, Wish I did :^} Certainly better than what I have...

Now If i can just get George to offer a 3" Round PCB version of the "Badger Keyer Kit"

I got one of those Silver ALTOIDS Tins on Saturday. (Tangerine Sours)

The Wife says, " You are just buying them for the Tin, Aren't you? "

What was I going to say, "Yes, Dear", and put it back on the shelf?

No Way! Hey, They are Great, I can't wait to find them on sale in six packs. :^}

I was going to build my "Badger Paddles" on a "KIWI TIN" but this new Altoids is one "Pretty Baby" Not only that, but they would make some "Snazzy Wheels" for a toy Car project for the Grand Kids. Them and the "AOL CD's" :^}

Well Gang, I have babbled on enough for tonight. Always good to read about Radio Stuff, although there are a few other interests in life.

I hope some of you find something of interest. In any case I have Spent my Two Hay Penny Bits... GN

QRPP Dx Tu, (C) 2002 K3TKS

Sir George, The First :^}

72 ES QRP DX TU (C) 1986, G. "Danny" Gingell, K3TKS@ abs.net
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Date: Sun, 14 Jul 2002 23:54:40 -0500
From: "George, W5YR" <w5yr@att.net>
To: nkennedy@tcainternet.com
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [129767] Re: Experiment of reproducible results PART II
Message-ID: <3D325590.E2F65D92@att.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Well, you old son-of-a-gun, what are you doing out playing with little
boats when you could be in here fussing with the rest of us! <:}

Clever retorts inserted inline below:

Nick Kennedy wrote:

>
> Whoa--looks like missed out on a good one by being on a canoe trip (my
> first) this weekend. But I'll pitch in my 0.02 Euros worth anyway--my
> small contribution to The Discussion That Can Never End.
>
> On what matching does for you--I don't necessarily agree that it allows the
> TX to give its Maximum Output. I think Rated Output would be more like it.
> Reason--you're not necessarily matching the source resistance when you
> provide the desired 50 ohm load. I think we've discussed this and sort of
> agreed on it before.

Absolutely correct. As any amplifier designer will tell you, the last thing he wants to see happen is for his amplifier to be operated for Maximum Power Transfer. By definition, and for starters, that would result in an overall efficiency of 50% which is not too swift. Plus the distortion would go out the roof, etc.

But that really is not much of a consideration because no one, including the designer, could give a value of load which would produce that result. Walt Maxwell's material in the ARRL Handbook and his book Reflections were removed from ARRL's marketing effort mainly because of his early work stating that the conjugate match situation in a network applied also to the transmitter output. The ARRL editor who pulled his stuff explained in a public email - which I saved and cannot find! - that he removed the material because of the connection to and insistence upon a conjugate match to the transmitter. The problem as he explained it, is that no one could say what the "output impedance" of an r-f amplifier operating AB or B was. It was not used in the design or in determining the operating parameters. So, as he reasoned, why publish material based upon conjugately matching a value that no one could state and that no one used?

As you point out this has been rehashed ad infinitum on r.r.a.a. and QEX regularly publishes shots and counter shots by Bruene and Maxwell. I think that Walt has finally backed off the conjugate match to the transmitter itself and is now saying that what conjugate matching accomplishes in the antenna system is two-fold: (a) transfer of the Maximum *Available* Power from the transmitter to the antenna system by means of conjugate matching throughout the "rest" of the system and (b) presentation of the proper load resistance to the amplifier to that it can deliver its Maximum Available Power.

Note carefully that this is not the same as the Maximum Power the amplifier can deliver. As you point out, it is the "most" power that the amplifier can deliver and meet design specs on efficiency and output power and distortion. It is the power that is delivered to the design load resistance, usually 50 ohms. Any other load resistance will result in other than the specified operation of the amplifier with attendant decreases in efficiency and output and increases in distortion components.

The May/June QEX contains Bruene's "final shot" as he announced at a radio club meeting recently(!) at killing the notion of conjugately matching a transmitter. Worth reading. He makes a pretty convincing argument and experimental demonstration that Walt's load pull approach is hyper-prone to error and cannot be trusted. So, as he concludes, neither can Walt's claim to have proved experimentally that a transmitter with a 50 ohm load was conjugately matched to its internal/output impedance.

As I tried to boil down in my postings, from our point of view as

operators, our concern is to operate our antenna systems, tuners, lines, whatever, in the manner that results in the transmitter simply seeing a 50 ohm resistor at the input of the coax going to the antenna or the tuner. The existence of a conjugate match situation in the rest of the antenna system ensures that the power that the transmitter can put out and meet specs will have the best chance to make it to the antenna and be radiated. Your earlier spreadsheet studies of mirrored impedances were very interesting, by the way.

>

> On mismatches caused by measurements ... I agree that you can't measure
> anything without disturbing it a bit; and that SWR meters are going to
> introduce a small mismatch, but it's still hard to believe that this is the
> cause of the big bad discrepancies some people are reporting. Unless the
> meter design is really poor.

Or people are reporting things in good faith but are just not correct . . .

>

> Let's see--I'm right now trying my MFJ-259B into a 50 ohm BNC
> terminator--SWR at 21 MHz is 1.0 to 1. Now shooting thru my homebrew W7EL
> wattmeter / SWR meter at 21 MHz to the same load, SWR is 1.1 to 1. OK it
> had an effect, but it's not huge. And I freely admit that my construction
> techniques on this SWR meter weren't the best.

As I said, what happens depends entirely upon the specifics of the system and the components, frequency, lengths of feedline, etc. You could probably hook Bird 43 meters in cascade all you want with reasonable assurance that each would do its job properly. But, the little reflectometers found in little tuners - and not so little tuners - are far from perfect and have definite insertion effects upon one another.

You might try that again with a tuner after the W7EL meter and a non-50-ohm complex load and a few feet of coax between the 259B and the meter and the tuner. Might see a little more difference.

I stick with my bottom line: the place to see if you are correctly loading the amplifier is to look at its output and see whether or not there is a 50 ohm resistance there as presented by the antenna system. That is what the SWR circuitry built in the rig does. It measures voltage and current at that point and tells its meter to read zero or 1:1 on the scale if the answer is "50 ohms resistive." Any other value or any reactive component causes the meter to read "not zero" and show an equivalent SWR value that *would* exist on a real transmission line where voltage and current could be measured at several points and the SWR determined directly. Remember the old Lecher Lines in Fields and Lines lab?

>

> Concerning the original issue on Reproducible Results Part I (if I remember
> correctly)--the SWR would jump up when power was reduced. I used to see
> that on some rigs I owned previously. My theory (not too rigorous

> scientifically) was that the amplifier liked to go into oscillation, but
> sufficient drive would swamp or otherwise overwhelm that tendency.
> Reducing drive below a critical value would allow the evil spirits to come
> to the fore? What do the text books say about that one?

Well, Nick, somehow I must have missed that one because that doesn't ring any bells. But, in general, an SWR reading with modern reflectometer devices is based solely on the ratio of forward to reflected power if the meter works properly. That ratio is determined by the ratio of the antenna load impedance to the Z_0 of the line. If that doesn't change, yet the meter reads differently for higher or lower power levels or with position along the line - that ain't right! <:}

Sorry, but no cigar on the evil spirits model - it is all due to the properties of the smoke concealed in the various components.

Good to hear from you again, buddy!

73/72/00, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe
Amateur Radio W5YR, in the 56th year and it just keeps getting better!
QRP-L 1373 NETXQRP 6 SOC 262 COG 8 FPQRP 404 TEN-X 11771 I-LINK 11735
Icom IC-756PRO #02121 Kachina 505 DSP #91900556 Icom IC-765 #02437

Date: Mon, 15 Jul 2002 00:10:57 -0500
From: "George, W5YR" <w5yr@att.net>
To: k3tks@u1.abs.net
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [129768] Re: Antennas, Transmission lines, Power and SWR
Message-ID: <3D325961.B80E565C@att.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Thanks for such kind words, George. Makes me sad to have to reply a little negatively to one of your points, though. And forgive me for snipping most of your posting to save some 1's and 0's.

That is the part about pruning the antenna for minimum SWR on the line in the absence of a tuner. That works fine if you work a single band and stay within a portion of that band if it is 160 - 40 meters. But if the antenna is a multi-band job with intentionally tuned feeders, then the antenna length is almost irrelevant. Even a single band antenna changes its driving-point Z considerably over the entire band, especially on 80.

There can be no argument that anything that reduces loss in the antenna

system is to be desired. But as in any engineering situation, the numbers come into play in determining how much effort is worthwhile in achieving this compared to the impact of the results.

Specifically, the matched loss on 40 meters of good coax is usually around 0.5 dB, or even less on 80. Now, we ignore the advice to prune the antenna and/or operate at the "other end of the band" and find that our total feedline loss has gone up maybe a few tenths of a dB more. Now, we have to ask how important is it to restrict ourselves to operating in only one end of the band in order to "avoid loss?" In this case, the added loss would be absolutely undetectable at "the other end" in the presence of any noise or QRM whatsoever. The negative here is not in signal strength at the far end but in dealing with the change in line input impedance because of the increased SWR, however small. For this, we need a tuner to restore the proper 50 ohm resistive load for the transmitter even though that tuner will do nothing to remedy the added line loss.

That is only one of the many situations in which feedline loss due to an imperfect antenna/line match introduces a degree of loss. How much? How important? What is the cost to improve it? What do you get for your effort and money?

Your other points I agree with completely!! I use MFJ 989C "3 KW" tuners for my 5 watts QRP. I use RG-213 from the W2DU baluns into the shack from the ladderlines to the antennas - three of them. Big, heavy stuff! <:}

Thanks again, George, for making an old man feel better about using so much of the reflector's bandwidth. Hope Chuck didn't mind too much . . .

73/72/00, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe
Amateur Radio W5YR, in the 56th year and it just keeps getting better!
QRP-L 1373 NETXQRP 6 SOC 262 COG 8 FPQRP 404 TEN-X 11771 I-LINK 11735
Icom IC-756PRO #02121 Kachina 505 DSP #91900556 Icom IC-765 #02437

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> Sure a pleasant read as compared to the often Off Topic material that we
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>
> While, I found it both educational and enlightening, One other aspect of
> the subject has been overlooked. IMHO.

<snip>

Date: Mon, 15 Jul 2002 06:33:34 +0000
From: "Leon Heller" <leon_heller@hotmail.com>
To: w2bvh@comcast.net, qrp-l@lehigh.edu
Subject: [129769] Re: Is direct conversion fm a contradiction in terms?
Message-ID: <F192m0ALtt5UXMnec1F0001416c@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

>From: lenny wintfeld <w2bvh@comcast.net>
>Reply-To: w2bvh@comcast.net
>To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
>Subject: Is direct conversion fm a contradiction in terms?
>Date: Sun, 14 Jul 2002 20:20:09 -0400
>
>Is it possible to detect fm at baseband? Is it practical?

Yes. You demodulate the baseband signal by sampling it and multiplying each sample by a delayed copy of itself and low-pass filter the result. You need to use a DSP for this, of course. I keep meaning to try this for myself.

73, Leon

--

Leon Heller, G1HSM Tel: +44 1327 359058 Email:leon_heller@hotmail.com
My web page: http://www.geocities.com/leon_heller
My low-cost Altera Flex design kit: <http://www.leonheller.com>

Chat with friends online, try MSN Messenger: <http://messenger.msn.com>

Date: Mon, 15 Jul 2002 06:40:44 +0000
From: "Leon Heller" <leon_heller@hotmail.com>
To: n5zgt@swcp.com, qrp-l@lehigh.edu
Subject: [129770] Re: OT: HT Battery Supplier Comments PSE
Message-ID: <F145WwMxKtE7wsmIyvV000143a8@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

>From: "Brian P. Mileschosky" <n5zgt@swcp.com>
>Reply-To: n5zgt@swcp.com
>To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
>Subject: OT: HT Battery Supplier Comments PSE
>Date: Sun, 14 Jul 2002 18:43:54 -0600
>
>Hi All,
>
> Sorry for the off-topic post, but I figured some of you might be
>experienced with replacing original battery packs for HTs.
>
> I have a Yaesu FT-416 2-meter HT (gray version) and an FT-530, both of
>which use the same battery packs. I am looking to replace their original
>NiCd FNB-25 (7.2-volt, 600-mAh) and FNB-27 (12-volt, 900-mAh) packs since
>they are beginning to lose their charge. I think I will replace them with
>NiMH packs.

Apparently, battery packs can easily be opened by putting them in a freezer
for an hour or two. They are then easy to split apart for battery
replacement.

73, Leon

--

Leon Heller, G1HSM Tel: +44 1327 359058 Email:leon_heller@hotmail.com

My web page: http://www.geocities.com/leon_heller

My low-cost Altera Flex design kit: <http://www.leonheller.com>

Chat with friends online, try MSN Messenger: <http://messenger.msn.com>

Date: Mon, 15 Jul 2002 03:17:01 -0400
From: "Richard Brummer, K2JQ" <k2jq@rcn.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>,
<n5zgt@swcp.com>
Subject: [129771] Re: OT: HT Battery Supplier Comments PSE
Message-ID: <011401c22bcf\$9dcbd0c0\$0300a8c0@dad-s-computer.rcn.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

>From: "Brian P. Mileschosky" <n5zgt@swcp.com>
>Reply-To: n5zgt@swcp.com
>To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
>Subject: OT: HT Battery Supplier Comments PSE
>Date: Sun, 14 Jul 2002 18:43:54 -0600

>

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>

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>original NiCd FNB-25 (7.2-volt, 600-mAh) and FNB-27 (12-volt, 900-
>mAh) packs since they are beginning to lose their charge. I think I will
>replace them with NiMH packs.

I have had very favorable experience with battery packs supplied by W&W Associates, in Hicksville, NY (<http://www.wwassociates.com/>). I have found their battery packs to be a reasonably priced alternative to the OEM packs for my Icom W32A. Their products are available at many of the popular dealers.

No connection with W&W, etc. etc. -- just a satisfied customer.

73

Dick K2JQ

Date: Mon, 15 Jul 2002 05:54:37 -0600 (MDT)
From: "Karl F. Larsen" <k5di@zianet.com>
To: qrp-l@lehigh.edu
Subject: [129772] Modulation modes
Message-ID: <Pine.LNX.4.44.0207150538300.1656-1000000@Daisy.dog>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

I was sure that Frequency Modulation while nice and quiet with a big signal would fall flat on it's face against SSB.

So a test with several listeners was conducted and they had no idea what was going on. But the voice coming out of the radio asked questions, like "what day is this?". At first it was too much noise and they could not hear the questions. But as it got louder they could.

What happened was the listeners were able to copy the FM at a LOWER power than SSB.

This was done with a HP instrument as transmitter and the receiver was a Kenwood 940 transceiver and the test was conducted at the U of Texas, Austin.

The FM was narrow band and the SSB was normal and the frequency was in the 10 meter Ham band.

--
Yours Truly,

- Karl F. Larsen, (505) 524-3303 -

Date: Mon, 15 Jul 2002 06:58:38 -0500
From: "George, W5YR" <w5yr@att.net>
To: k5di@zianet.com
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [129773] Re: Modulation modes
Message-ID: <3D32B8EE.32DA318A@att.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Karl, could you give a reference where this experiment is described?

The likely explanation is that the capture effect of FM exceeded the S/N improvement capability of SSB under the conditions of the experiment.

73/72/oo, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe
Amateur Radio W5YR, in the 56th year and it just keeps getting better!
QRP-L 1373 NETXQRP 6 SOC 262 COG 8 FPQRP 404 TEN-X 11771 I-LINK 11735
Icom IC-756PRO #02121 Kachina 505 DSP #91900556 Icom IC-765 #02437

"Karl F. Larsen" wrote:

>
> I was sure that Frequency Modulation while nice and quiet with
> a big signal would fall flat on it's face against SSB.
>
> So a test with several listeners was conducted and they had no
> idea what was going on. But the voice coming out of the radio asked
> questions, like "what day is this?". At first it was too much noise and

> they could not hear the questions. But as it got louder they could.
>
> What happened was the listeners were able to copy the FM at a
> LOWER power than SSB.
>
> This was done with a HP instrument as transmitter and the
> receiver was a Kenwood 940 transceiver and the test was conducted at the
> U of Texas, Austin.
>
> The FM was narrow band and the SSB was normal and the frequency
> was in the 10 meter Ham band.

Date: Mon, 15 Jul 2002 08:05:39 -0400
From: Jake Brodsky <frussle@erols.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [129774] Re: Modulation modes
Message-ID: <0ge5ju8mckncbedltmtmu0ofmf45h4vqsr@4ax.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: quoted-printable

> The FM was narrow band and the SSB was normal and the frequency=20
>was in the 10 meter Ham band. =20

HOW narrow band? Was the whole FM signal 3 kHz wide? If not, then
the test is not properly controlled. Look up Shannon's Limit for
details.

TNSTAAFL

73,

Jake Brodsky, <mailto:frussle@erols.com>
"Nearly fifty percent of all graduates came from=20
the bottom half of the class."

Date: Mon, 15 Jul 2002 06:57:10 -0600 (MDT)
From: "Karl F. Larsen" <k5di@zianet.com>
To: "George, W5YR" <w5yr@att.net>
Cc: Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>
Subject: [129775] Re: Modulation modes
Message-ID: <Pine.LNX.4.44.0207150655330.2196-1000000@Daisy.dog>
MIME-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi George, I heard about this from a friend Charlie Solie who graduated from that cow college. He said it was written up in a IEEE paper but no idea which one.

On Mon, 15 Jul 2002, George, W5YR wrote:

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> > was in the 10 meter Ham band.
>

--

Yours Truly,

- Karl F. Larsen, (505) 524-3303 -

Date: Mon, 15 Jul 2002 09:21:01 -0400
From: W2AGN <w2agn@w2agn.net>
To: Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>
Subject: [129776] Re: Modulation modes
Message-ID: <3D3293FD.22693.563CECF@localhost>
MIME-version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT
Content-description: Mail message body

On 15 Jul 2002 at 6:57, Karl F. Larsen wrote:

>
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> from that cow college. He said it was written up in a IEEE paper but no
> idea which one.
>
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> >
> > The likely explanation is that the capture effect of FM exceeded the S/N
> > improvement capability of SSB under the conditions of the experiment.

The SSB rig was using an EH antenna.

--

/ \ / \ / \ / \ / \ John L. Sielke
(W)(2)(A)(G)(N) <http://www.w2agn.net>
 _ / _ / _ / _ / _ / ARCI, NJQRP, ARQrp, GQRP, RSGB
Ex- K3HLU, W7JEF, W4MPC, N4JS

Date: Mon, 15 Jul 2002 08:22:38 -0500
From: "George, W5YR" <w5yr@att.net>
To: "Karl F. Larsen" <k5di@zianet.com>
Cc: Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>
Subject: [129777] Re: Modulation modes
Message-ID: <3D32CC9E.9AAF753B@att.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

OK, thanks, Karl.

I strongly suspect that the outcome you reported was a fairly unique result of the exact experimental conditions for the test. As I recall from my grad course in Modulation Theory, one would not expect even NBFM to best SSB until the FM signal strength reached a sufficient level for capture to begin asserting itself.

I operated NBFM on 10 and 11 meters back in the late 40's before getting my Class A in 1947 and going on AM - and before CB! In those days, NBFM was at a great disadvantage to DSB AM. If you could put in a fairly good signal - and that was easy on 10 during one of the best sun spot cycles ever - then the NBFM worked great. But let things start getting rough and the AM stations would win every time.

So, as a general rule, I believe that it is true that an SSB signal will provide a better S/N at the receiver than will a NBFM signal of the same PEP and occupied bandwidth. Counter examples can always be created by changing the test conditions, of course, but on an equal footing, a weak SSB signal should always have the advantage over a weak NBFM signal.

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Date: Mon, 15 Jul 2002 09:27:07 -0400
From: brickle <brickle@pobox.com>
To: leon_heller@hotmail.com
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [129778] Re: Is direct conversion fm a contradiction in terms?

Message-ID: <3D32CDAB.3F569C26@pobox.com>
MIME-version: 1.0
Content-type: text/plain; charset=us-ascii
Content-transfer-encoding: 7BIT

Leon Heller wrote:

> ...You demodulate the baseband signal by sampling it and multiplying each
> sample by a delayed copy of itself and low-pass filter the result. You need
> to use a DSP for this, of course...

More generally, with the signal in quadrature at baseband, you can compute the phase angle (and thus the frequency change) between samples with the complex arctangent, and then smooth the result.

A current Pentium is plenty fast for this job. The complex basebanding, now, that's a different story...there you have to exercise at least a thimbleful of ingenuity, anyway.

Possibly of interest:
<http://www.gnu.org/software/gnuradio/gnuradio.html>

73
Frank
AB2KT

Date: Mon, 15 Jul 2002 08:45:59 -0500
From: Tom Busch <tomb@kiva.net>
To: WD8CIV@worldnet.att.net,
 "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [129779] Re: Next step beyond Altoids?
Message-ID: <4.2.0.58.20020715084226.009d0100@t.pop.kiva.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

I LOVE getting AOL CDs.

I make countless compass roses for my satellite work, using Stomp Inc.'s software.

Also, whenever I need a nice circular calculator for something like doppler conversion, these make nifty stiffeners.

Finally, one of the Crystal Radio groups on Yahoo has plans for making a 500 pF variable capacitor out of them (No, you don't have to solder to the foil.)

73,

Tom WB8WOR

At 05:44 PM 7/13/02 -0400, David Hinerman wrote:

>At 04:40 PM 7/13/2002 -0400, you wrote:

>>Perhaps I've missed any previous discussion, so I apologize in advance.

>>

>>I just received (another) one of those annoying AOL CDs in the mail today.

>>This particular CD came in a rather nifty metal container, which may have

>>enough room for some sort of all-SMT transceiver project. Has anyone given

>>this any thought?

>

>Al,

>

>I think somebody on the list mentioned getting one a few months ago. I

>think a Polapulse battery (the really thin one from a Polaroid film pack)

>would make a good internal power source.

>

>Dave

>

>-----

>"You can fool some of the people all of the time. That's enough to make a

>living." - Lance Burton

>-----

>Dave Hinerman

>WD8CIV@att.net

>

Date: Mon, 15 Jul 2002 10:08:24 -0400

From: "Walt Amos" <k8cv@netzero.net>

To: <leon_heller@hotmail.com>

Cc: "Qrp-L Mail" <qrp-l@lehigh.edu>

Subject: [129780] Re: OT: HT Battery Supplier Comments PSE

Message-ID: <003501c22c09\$1659b1e0\$9892d43f@waltamos>

MIME-Version: 1.0

Content-Type: text/plain;

charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

MY GOD !! Never tried that , DAMN !! GOOD IDEA !! I have picked at them with knives and cable slitters with GLOVES on to keep from cutting off my FINGERS :-) I found that ladies nail polish remover works wonders on the seam after years of the HACK AND SMASH method. It really is ACETONE which dissolves the

glue. Now a few coats of that stuff and the battery cases pop open and I still have all my fingers :-)

Walt

----- Original Message -----

From: Leon Heller <leon_heller@hotmail.com>

To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>

Sent: Monday, July 15, 2002 2:40 AM

Subject: Re: OT: HT Battery Supplier Comments PSE

>

>

>

> >From: "Brian P. Mileschosky" <n5zgt@swcp.com>

> >Reply-To: n5zgt@swcp.com

> >To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

> >Subject: OT: HT Battery Supplier Comments PSE

> >Date: Sun, 14 Jul 2002 18:43:54 -0600

> >

> >Hi All,

> >

> > Sorry for the off-topic post, but I figured some of you might be
> >experienced with replacing original battery packs for HTs.

> >

> > I have a Yaesu FT-416 2-meter HT (gray version) and an FT-530, both
of

> >which use the same battery packs. I am looking to replace their original
> >NiCd FNB-25 (7.2-volt, 600-mAh) and FNB-27 (12-volt, 900-mAh) packs since
> >they are beginning to lose their charge. I think I will replace them
with

> >NiMH packs.

>

> Apparently, battery packs can easily be opened by putting them in a
freezer

> for an hour or two. They are then easy to split apart for battery
> replacement.

>

> 73, Leon

> --

> Leon Heller, G1HSM Tel: +44 1327 359058 Email:leon_heller@hotmail.com

> My web page: http://www.geocities.com/leon_heller

> My low-cost Altera Flex design kit: <http://www.leonheller.com>

>

>

> -----

> Chat with friends online, try MSN Messenger: <http://messenger.msn.com>

>
>
>

Introducing NetZero Long Distance
Unlimited Long Distance only \$29.95/ month!
Sign Up Today! www.netzerolongdistance.com

Date: Mon, 15 Jul 2002 08:17:43 -0600
From: "Rod N0RC" <rod@n0rc.us>
To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [129781] Rocky Mountain Rock-mite EARLY SPY PHOTOS!!!
Message-ID: <[000b01c22c0a\\$6389de30\\$6501a8c0@greyrock](mailto:000b01c22c0a$6389de30$6501a8c0@greyrock)>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Folks,

Here at N0RC labs (actually a messy basement) we got access to a
Rock-mite from Small Wonder Labs. Don't ask how and I won't have to
lie! ;-) It's a trade secret.

In a matter of hours the rig was built and mounted in the QRP standard
enclosure, and Altoid mint tin. Actually it was part of the test.
Rumors have been flying around about the rig's size, power and
frequency range. A hasty web page was assembled to document the
salient facts:

<http://www.frii.com/~rwc/r-m/>

Quick Facts:

- o It does fit in an Altoids Mint Tin
- o Power out is ~400-500 milliwatts with ~12 Vdc supply.
 (not hundreds of megawatts as reported earlier)
- o Tuning range is about 1 kilohertz in two
 discrete steps (not 100s of kilohertz as previously
 rumored)
- o There are NO toroids to wind! (AMAZING)

Does it work? Yes indeed. I finished building the rig during the
14-JUL ARCI HB Sprint and made three QSOs with it: N0TK, C0; K7RE, SD

and N9NE, WI. I'm not sure about N9NE I didn't hear the QSL because of some QRM. (Hey do I get extra points for building and using a rig during the contest? ;-)

NOTE: THE ROCK-MITE IS NOT YET AVAILABLE. NØRC LABS RECOMMENDS WATCHING THE Small Wonders Website: www.smallwonderlabs.com SOURCES THAT WISH TO REMAIN ANONYMOUS TELL NØRC STAFF MEMBERS (that's me, Rod) THAT AN OFFICIAL ANNOUNCEMENT WILL BE MADE SOON.

OK, thats it, I think most of the cat is now out of the bag.

73, Rod NØRC

Date: Mon, 15 Jul 2002 11:06:09 -0400
From: "William K. Harding" <k4ahk@ix.netcom.com>
To: rod@n0rc.us, Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [129782] Re: Rocky Mountain Rock-mite EARLY SPY PHOTOS!!!
Message-ID: <E17U7PU-0003qE-00@mclean.mail.mindspring.net>
Mime-version: 1.0
Content-type: text/plain; charset="US-ASCII"
Content-transfer-encoding: 7bit

Rod:

Is the green component mounted to the side of the case the vxo control?

Bill - K4AHK

>From: "Rod NØRC" <rod@n0rc.us>
>To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
>Subject: Rocky Mountain Rock-mite EARLY SPY PHOTOS!!!
>Date: Mon, Jul 15, 2002, 10:17 AM
>

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>
>73, Rod N0RC
>
>
>

Date: Mon, 15 Jul 2002 11:23:53 -0400
From: "Hare,Ed, W1RFI" <w1rfi@arrl.org>
To: "'ec5aca@wanadoo.es'" <ec5aca@wanadoo.es>,
Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [129783] RE: Zack Lau DC tribander
Message-ID: <125490A005E3D3118C9C00805FC743CC040F4483@kahless.arrlhq.org>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

> I am also looking for info about a triband (18, 21 and 24) HF DC
> transceiver designed by QRP-L member Zack Lau. Unfortunately I have

> not found Zack's e-mail address with his "new" call (I guess it will
> be something like call@arrl.org). I am looking for the full article
> with schematic and circuit description. I am designing a 15 meter DC
> transceiver and want to see the high HF band tricks that Zack used.
> Again a pdf or scanned images will do the trick. TIA.

Two conventions work for ARRL HQ staff addresses:

callsign@arrl.org
firstinitiallastname@arrl.org

Old callsigns should also work, so any of the following SHOULD work for Zack:

w1vt@arrl.org
zlau@arrl.org
kh6cp@arrl.org

73,=20
Ed Hare, W1RFI
ARRL Lab
225 Main St
Newington, CT 06111
Tel: 860-594-0318
Internet: w1rfi@arrl.org
Web: <http://www.arrl.org/tis>

> -----Original Message-----

> From: Juanjo Pastor [mailto:ec5aca@wanadoo.es]
> Sent: Friday, July 12, 2002 5:48 AM
> To: Low Power Amateur Radio Discussion
> Subject: Zack Lau DC tribander

>=20

>=20

> Hello again,

>=20

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> transceiver designed by QRP-L member Zack Lau. Unfortunately I have
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> with schematic and circuit description. I am designing a 15 meter DC
> transceiver and want to see the high HF band tricks that Zack used.
> Again a pdf or scanned images will do the trick. TIA.

>=20

> And please send it to my address in the signature, ea5chq@wanadoo.es

>=20

> 73, 72 de Juanjo, EA5CHQ-EC5ACA. EA-QRP #104, G-QRP #9742,
> QRP-L #1662.
>=20
> Juanjo Pastor
> C/San Roque, 4-1=BA
> 46460 Silla
> SPAIN
>=20
> e-mail: ea5chq@wanadoo.es
> Tel.: +034 96 120 17 67
> Movil: 651 35 35 11
>=20

Date: Mon, 15 Jul 2002 09:36:06 -0600 (MDT)
From: "Karl F. Larsen" <k5di@zianet.com>
To: "George, W5YR" <w5yr@att.net>
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [129784] Re: Modulation modes
Message-ID: <Pine.LNX.4.44.0207150931240.2619-1000000@Daisy.dog>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi George, I have a hunch the signal generator put out an adjustable peak-to-peak value. So since the PP value of NBFM is equal to the average power, and the average power of SSB was about 20% of the NBFM, that is why NBFM won.

Charlie can't recall which signal generator was used. Thinks it was HP since they were big in commo gear then.

On Mon, 15 Jul 2002, George, W5YR wrote:

> OK, thanks, Karl.
>
> I strongly suspect that the outcome you reported was a fairly unique result
> of the exact experimental conditions for the test. As I recall from my grad
> course in Modulation Theory, one would not expect even NBFM to best SSB
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> Class A in 1947 and going on AM - and before CB! In those days, NBFM was at
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> Icom IC-756PRO #02121 Kachina 505 DSP #91900556 Icom IC-765 #02437
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--

Yours Truly,

- Karl F. Larsen, (505) 524-3303 -

Date: Mon, 15 Jul 2002 10:25:51 -0500
From: Karl Kanalz <kkanalz@gcecispc.com>
To: "'k5di@zianet.com'" <k5di@zianet.com>,
Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [129785] RE: Modulation modes
Message-ID: <01C22BEA.80D0BBA0@KKANALZ>

Karl L. (the "other" Karl!) is absolutely correct. It has been known for years that FM is superior to SSB (for the same receiver bandwidth), but the caveat is: ".... In a NON-FADING propagation environment".

In a real-life, h.f. band operation is generally a "FADING" environment, and that's where SSB becomes superior to Frequency Modulation over a given, fading, path.

By the way, did you guys know that at one time Armstrong (one of the "fathers" of FM) consulted with Colpitts to develop a new oscillator?

They called it the Armpitt oscillator..... :)

Karl K - W8TIF
McKinney, Texas

On Monday, Karl Larsen wrote:

I was sure that Frequency Modulation while nice and quiet with a big signal would fall flat on it's face against SSB.

So a test with several listeners was conducted and they had no idea what was going on. But the voice coming out of the radio asked questions, like "what day is this?". At first it was too much noise and they could not hear the questions. But as it got louder they could.

What happened was the listeners were able to copy the FM at a LOWER power than SSB.

This was done with a HP instrument as transmitter and the receiver was a Kenwood 940 transceiver and the test was conducted at the U of Texas, Austin.

The FM was narrow band and the SSB was normal and the frequency was in the 10 meter Ham band.

Date: Mon, 15 Jul 2002 08:39:53 -0700 (PDT)
From: Jim Cluett <w1pid@yahoo.com>
To: qrp-l@lehigh.edu
Subject: [129786] Re. Rocky Mountain Rock-mite EARLY SPY PHOTOS!!!
Message-ID: <20020715153953.63698.qmail@web11606.mail.yahoo.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

Rod! You Rock-Mite animal! What a master-piece. (Which proves: a rolling Rock-Mite gathers no moss.) I tried getting mine into the Altoids, and I didn't think I

could do it. Connectors too big. Your photos are super
and show me the error of my ways. Now I have another
problem. After working a few stations, I toasted mine,
by crossing the V+ polarity during hook-up late one
Friday night. Of course, there's a Riddle me a Rock
Mite entry for this:

There once was a Rookie Rock-Miter
who pulled a late Friday nighter.
He crossed a hot wire
nearly starting a fire.
Now he a rookie without his rock-miter.

72 Jim w1pid@arrl.net

Do You Yahoo!?
Yahoo! Autos - Get free new car price quotes
<http://autos.yahoo.com>

Date: Mon, 15 Jul 2002 11:41:26 -0700
From: "Dave Benson" <nn1g@earthlink.net>
To: <k4ahk@ix.netcom.com>, <qrp-1@lehigh.edu>
Subject: [129787] Re: Rocky Mountain Rock-mite EARLY SPY PHOTOS!!!
Message-ID: <001e01c22c2f\$3ab32820\$d1e8d73f@pavilion>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi Bill-

Sort of! The green doodad is a pushbutton switch -the rig runs at two
discrete frequencies 700 Hz apart. Tap the switch and the frequency-pair
reverses. The offset then flips to the opposite frequency on key-down to
provide the T/R offset.

Hold the switch on a little longer and the keyer speed control comes alive.
If you don't want to use the built-in-keyer there's a 'transparent' mode for
straight key/external keyer inputs.

73- Dave

Dave Benson, K1SWL
dave@smallwonderlabs.com
http://smallwonderlabs.com
Phone/fax 860-537-8031

-----Original Message-----

From: William K. Harding <k4ahk@ix.netcom.com>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Date: Monday, July 15, 2002 8:08 AM
Subject: Re: Rocky Mountain Rock-mite EARLY SPY PHOTOS!!!

Rod:

Is the green component mounted to the side of the case the vxo control?

Bill - K4AHK

Date: Mon, 15 Jul 2002 09:01:26 -0700
From: "Bill Jones" <kd7s@psnw.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [129788] The Rock-Mite "L" Factor
Message-ID: <000901c22c18\$e0585dc0\$9110010a@fresno>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

As a card-carrying Christian, the word "LUST" is one I try to avoid at all costs. But that little Rock-Mite sure stirs up a lot of "want" in my less-than-perfect mind.

=====

Bill Jones - <><
Sanger, California

=====

Date: Mon, 15 Jul 2002 09:15:47 -0700
From: "Ian Wilson" <ianmwilson@earthlink.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [129789] Re: Modulation modes

Message-ID: <005601c22c1a\$e168aa60\$0b02a8c0@trabucoserver>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I've done some experiments with 2m and 6m mobile rigs to see whether SSB has an advantage over FM under those conditions.

The only variable was the modulation type; antenna, location of vehicle, peak power, etc, remained constant.

The results failed to demonstrate any significant advantage of SSB over FM, either for readability or for range.

Since this was surprising (and disappointing), I started thinking about what might be happening.

NBFM uses about 17.5kHz of bandwidth. SSB uses about 2.5kHz. So there should be a power gain of 7:1, or 8dB, from the relative bandwidths. To offset this, we are not producing anything like the possible max PEP on sideband, both because we are not using any pre-emphasis, and because we don't drive the audio stages very hard (i.e. we don't usually yell into the microphone). I would estimate the total of these two effects as something like 5:1, or 7dB.

So it looks like a wash. This agrees with our observations.

--ian k3imw/6

Date: Mon, 15 Jul 2002 12:37:58 -0400
From: "Richard Brummer, K2JQ" <k2jq@rcn.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [129790] Re: The Rock-Mite "L" Factor
Message-ID: <01b001c22c1d\$fc1fa040\$0300a8c0@dad-s-computer.rcn.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I guess that means that solder will soon be melting in Sanger, CA, right ?

Dick K2JQ

-----Original Message-----

From: Bill Jones <kd7s@psnw.com>

To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>

Date: Monday, July 15, 2002 12:05 PM

Subject: The Rock-Mite "L" Factor

>As a card-carrying Christian, the word "LUST" is one I try to avoid at all
>costs. But that little Rock-Mite sure stirs up a lot of "want" in my
>less-than-perfect mind.

>=====

>Bill Jones - <><

>Sanger, California

>=====

>

Date: Mon, 15 Jul 2002 12:45:35 -0400

From: Bill Coleman <aa4lr@arrl.net>

To: <jamesd1@flash.net>,

"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>

Subject: [129791] Re: "Dipping" traps

Message-ID: <20020715164706.YDR1761.imf15bis.bellsouth.net@[192.168.0.20]>

Mime-Version: 1.0

Content-Type: text/plain; charset="US-ASCII"

On 7/10/02 10:34 PM, James R. Duffey at jamesd1@flash.net wrote:

>Your ground system is good. Since the current in the ground peaks close to
>the antenna, it is more important to have lots of short radials than a few
>long radials. If you are interested, I did a short analysis for Dave Gauding
>some time ago as to what is the best use of wire in a radial system.

>

>For 20 M (66 ft wavelength) I get the following results:

>

>wire length	number	Length
> 66 ft	17	3.9 ft
> 100 ft	21	4.8 ft
> 200 ft	30	6.7 ft
> 343 ft	40	8.5 ft
> 500 ft	48	10.4 ft
> 700 ft	57	12.2 ft
> 830 ft	62	13.2 ft

>1000 ft	68	14.7 ft
>1296 ft	78	16.5 ft
>2000 ft	97	20.6 ft
>3318 ft	125	26.4 ft
>4000 ft	127	29.0 ft

What sort of nonsense is this?

For 1/4 wave vertical radials, there's little or no reason to extend them beyond 0.25 wavelength. For 20m, that would be $0.25 \times 984 / 14.0 = 17.5$ feet.

Second, if the radials are ground-mounted, then the losses due to coupling with the ground allow one to remove a few percent as well, since the last bit of radial wire doesn't carry much, if any current, and therefore doesn't "do" much. 0.22 wavelength is nearly equivalent to 0.25 wavelength.

Third, for ground-mounted radials, there's little difference between a solid metal sheet and wires spaced less than 0.05 or 0.025 wavelength apart. If ground conductivity is high, you can even use higher spacings.

So, for 0.25 wavelength ground-mounted radials, the circumference of the "circle" of radials is $(0.25 \times 2 \times \pi) = 1.57$ wavelengths. $1.57 / 0.05 = 31.4$ radials. So, call it 32-64 0.25 wavelength radials would be indistinguishable from a solid sheet. (Use 64 for soils with poorer conductivity, 32 for soils with greater conductivity)

Bottom line -- there's no reason to use radials longer than 0.25 wavelength, and certainly no reason to use more than 64 of them, in a ground-mounted vertical.

If you have 66 feet of wire, you're better off making FOUR 0.25 wavelength radials than 17 impossibly short ones....

Bill Coleman, AA4LR, PP-ASEL Mail: aa4lr@arrl.net
 Quote: "Not within a thousand years will man ever fly!"
 -- Wilbur Wright, 1901

Date: Mon, 15 Jul 2002 12:46:13 -0400
 From: "Fancher, Mark (GEAE)" <Mark.Fancher@ae.ge.com>
 To: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
 Subject: [129792] RE: The Rock-Mite "L" Factor
 Message-ID: <F9351DA9F0F6D41187410090277B3EB307D304B0@ev008msxaege.ae.ge.com>
 MIME-Version: 1.0
 Content-Type: text/plain;

charset="iso-8859-1"

Is there a web page reference to describe this rock-mite?

Mark, AA4MF

-----Original Message-----

From: Richard Brummer, K2JQ [mailto:k2jq@rcn.com]
Sent: Monday, July 15, 2002 12:38 PM
To: Low Power Amateur Radio Discussion
Subject: Re: The Rock-Mite "L" Factor

I guess that means that solder will soon be melting in Sanger, CA, right ?

Dick K2JQ

-----Original Message-----

From: Bill Jones <kd7s@psnw.com>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Date: Monday, July 15, 2002 12:05 PM
Subject: The Rock-Mite "L" Factor

>As a card-carrying Christian, the word "LUST" is one I try to avoid at all
>costs. But that little Rock-Mite sure stirs up a lot of "want" in my
>less-than-perfect mind.

>=====

>Bill Jones - <><
>Sanger, California

>=====

>

Date: Mon, 15 Jul 2002 10:05:40 -0700
From: "Tracy Markham" <tracy@bytemark.com>
To: "QRP-L" <qrp-l@lehigh.edu>, <aa4lr@arrl.net>
Subject: [129793] RE: "Dipping" traps
Message-ID: <GNEOLGDJDOPEALHJMKLCGEJACGAA.tracy@bytemark.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="Windows-1252"
Content-Transfer-Encoding: 7bit

HMMM ...

I was able to successfully 'pull' my signal toward where I wanted to talk by moving several very long radials toward where I wanted to work that day.

(back when I had a lot ...) I had a vertical up for 20m that had maybe 20 or so radials, most of 'em 1/4 wave. But I had a hard time working into Europe, so I put in three full wave radials pointing toward Europe.

It worked fairly well. I had experience with Cellular Phones in that the majority of radiation would 'follow' the path of the most metal in the car. Now, at 850 MHz that car body is wayyyy more than a wavelength, right?

SO, in a nutshell there are reasons to have longer radials. For me it was footprint and 'path' finding.

AM radio stations have to deal with that a lot, too. They are given an area to cover and have to manipulate their pattern to cover the area without covering into an adjacent area. Most of the time they do it with arrays of verticals, but frequently they are creative with the ground radials as well.

Tracy N4LGH

(snip)

For 1/4 wave vertical radials, there's little or no reason to extend them beyond 0.25 wavelength.

(snip)

Bottom line -- there's no reason to use radials longer than 0.25 wavelength

Date: Mon, 15 Jul 2002 12:10:07 -0500
From: David Gauding <david.gauding@bbs.galilei.com>
To: qrp-l@lehigh.edu
Subject: [129794] Wed, July 17 - Tailgate Sale
Message-ID: <5.1.1.6.0.20020715115949.00a14150@bbs.galilei.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Howdy,

If you happen to be in St. Louis this coming Wednesday evening, drop by for the St. Louis QRP Society's umpteenth Annual Tailgate Sale.

Usual place - the upper parking lot of the St. Louis Community College at Florissant Valley. Brats and cold soda available for those braving the 90F+ temps this week!

Never a charge to attend or sell or give away - especially the good stuff! <g>

If your in town without a ride, send e-mail and someone in your vicinity can probably pickup and deliver.

Plenty of antennas will be up too so bring a rig for show & tell and do a little operating.

See you there!

FOR THE ST. LOUIS QRP SOCIETY

de Dave, NF0R nf0r@slacc.com

Date: Mon, 15 Jul 2002 13:24:40 -0400
From: "William K. Harding" <k4ahk@ix.netcom.com>
To: nn1g@earthlink.net,
 Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [129795] Re: Rocky Mountain Rock-mite EARLY SPY PHOTOS!!!
Message-ID: <E17U9ZV-0004za-00@tisch.mail.mindspring.net>
Mime-version: 1.0
Content-type: text/plain; charset="US-ASCII"
Content-transfer-encoding: 7bit

Thanks, Rod and Dave. That's a cool solution.

Bill - K4AHK

>From: "Dave Benson" <nn1g@earthlink.net>
>To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
>Subject: Re: Rocky Mountain Rock-mite EARLY SPY PHOTOS!!!
>Date: Mon, Jul 15, 2002, 2:41 PM
>

>Hi Bill-
>
>Sort of! The green doodad is a pushbutton switch -the rig runs at two
>discrete frequencies 700 Hz apart. Tap the switch and the frequency-pair
>reverses. The offset then flips to the opposite frequency on key-down to
>provide the T/R offset.
>
>Hold the switch on a little longer and the keyer speed control comes alive.

>If you don't want to use the built-in-keyer there's a 'transparent' mode for
>straight key/external keyer inputs.

>

>73- Dave

>

>

>

>*****

>Dave Benson, K1SWL

>dave@smallwonderlabs.com

>http://smallwonderlabs.com

>Phone/fax 860-537-8031

>*****

>-----Original Message-----

>From: William K. Harding <k4ahk@ix.netcom.com>

>To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>

>Date: Monday, July 15, 2002 8:08 AM

>Subject: Re: Rocky Mountain Rock-mite EARLY SPY PHOTOS!!!

>

>

>Rod:

>

>Is the green component mounted to the side of the case the vxo control?

>

>Bill - K4AHK

>-----

>

>

Date: Mon, 15 Jul 2002 13:33:42 -0500

From: "Steve Blatman" <steve@inkspot.net>

To: qrp-l@lehigh.edu

Subject: [129796] twin-lead J-pole?

Message-ID: <20020715173009484.AAA307@mx1.bee.net@office>

MIME-Version: 1.0

Content-type: text/plain; charset=US-ASCII

Content-transfer-encoding: 7BIT

I remember seeing instructions for making a quickie, 2m j-pole antenna (or perhaps also a quickie dipole?) out of 300 ohm television twin-lead. I looked in my ARRL handbook, antenna handbook, and a bunch of other books last night, and came up dry. Can anyone point me to the instructions (or email them)? My son wants to set up his 2m xcvr in his bedroom (instead of the basement ham shack, where all the antenna leads go), and I was looking for a quickie antenna he could hang out his window.

TIA,
Steve
N1HDP

Steve Blatman (steve@inkspot.net)
Ink Spot Printing & Copy Center, Inc.
14 Church Road, Frazer, PA 19355 USA
Tel: (610) 647-0776
Fax: (610) 647-4560

Date: Mon, 15 Jul 2002 11:13:46 +0200
From: "Juanjo Pastor" <ec5aca@wanadoo.es>
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [129797] Zack Lau DC tribander and Ugly Weekender
Message-ID: <000601c22c26\$7573d4e0\$1d0c253e@fer>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

Hello everybody:

Thanks to all people who did offer their help. I was sent a pdf for that transceiver so I need no more help on this one. I am still in need of full info about the Ugly Weekender transmitter. I am designing a 15 meter DC transceiver with VFO but in my previous attempt the transmitter was pulling the VFO down for about 5 KHz so I have saved the receiver only. Now my approach is a 10.5 MHz VFO and doubler inspired by the SMK1 VFO by Wayne, NB6M I guess your call is, but using a bipolar NPN Colpitts VFO and moving the resonances to the needed frequencies. The TX will be an adaptation of the Ugly Weekender one, although the QRP tribander has also helped. I will be rebuilding the VFO and TX sections this week and next and will report my progress.

73, 72 de Juanjo, EA5CHQ-EC5ACA. EA-QRP #104, G-QRP #9742, QRP-L #1662.

Juanjo Pastor
C/San Roque, 4-1=BA
46460 Silla
SPAIN

e-mail: ea5chq@wanadoo.es
Tel.: +034 96 120 17 67
Movil: 651 35 35 11

Date: Mon, 15 Jul 2002 10:40:02 -0700
From: Timothy-Allen Albertson-KG6IRH <kg6irh@pacbell.net>
To: steve@inkspot.net
Cc: qrp-1@lehigh.edu
Subject: [129798] Re: twin-lead J-pole?
Message-ID: <023301c22c26\$a7c54d20\$ed39fea9@computer>
MIME-version: 1.0
Content-type: text/plain; charset=iso-8859-1
Content-transfer-encoding: 7BIT

Try

<http://www.fiu.edu/orgs/w4ehw/j-pole.html>

They do work, BTW. There are many other links on-line and you can run a Google or Yahoo search. This link though shows j-poles for bands other than 2 meters.

73 de tim kg6irh.

----- Original Message -----

From: "Steve Blatman" <steve@inkspot.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Monday, July 15, 2002 11:33 AM
Subject: twin-lead J-pole?

> I remember seeing instructions for making a quickie, 2m j-pole
> antenna (or perhaps also a quickie dipole?) out of 300 ohm
> television twin-lead. I looked in my ARRL handbook, antenna
> handbook, and a bunch of other books last night, and came up dry.
> Can anyone point me to the instructions (or email them)? My son
> wants to set up his 2m xcvr in his bedroom (instead of the
> basement ham shack, where all the antenna leads go), and I was
> looking for a quickie antenna he could hang out his window.
> TIA,
> Steve
> N1HDP
>
> Steve Blatman (steve@inkspot.net)
> Ink Spot Printing & Copy Center, Inc.
> 14 Church Road, Frazer, PA 19355 USA
> Tel: (610) 647-0776
> Fax: (610) 647-4560

Date: Mon, 15 Jul 2002 12:39:20 -0500
From: "Dale Mason" <dmason@softconnect.net>
To: <steve@inkspot.net>,
"Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [129799] Re: twin-lead J-pole?
Message-ID: <002001c22c26\$8d8aabd0\$6901a8c0@SCDOM>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Go to <http://www.qsl.net/wb3gck/jpole.htm>
It is simple to build and works well.

Dale, KD9LW

----- Original Message -----

From: "Steve Blatman" <steve@inkspot.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Monday, July 15, 2002 1:33 PM
Subject: twin-lead J-pole?

> I remember seeing instructions for making a quickie, 2m j-pole
> antenna (or perhaps also a quickie dipole?) out of 300 ohm
> television twin-lead. I looked in my ARRL handbook, antenna
> handbook, and a bunch of other books last night, and came up dry.
> Can anyone point me to the instructions (or email them)? My son
> wants to set up his 2m xcvr in his bedroom (instead of the
> basement ham shack, where all the antenna leads go), and I was
> looking for a quickie antenna he could hang out his window.
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> Steve
> N1HDP
>
> Steve Blatman (steve@inkspot.net)
> Ink Spot Printing & Copy Center, Inc.
> 14 Church Road, Frazer, PA 19355 USA
> Tel: (610) 647-0776
> Fax: (610) 647-4560
>

Date: Mon, 15 Jul 2002 13:47:27 -0400
From: David Hinerman <WD8CIV@worldnet.att.net>
To: qrp-1@lehigh.edu
Subject: [129800] Re: twin-lead J-pole?
Message-ID: <5.1.0.14.1.20020715134209.00a6bd90@ipostoffice.worldnet.att.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Steve,

Here's one:

<http://hamgate1.sunyerie.edu/races/antenna/pocket.htm>

These things are everywhere. If this doesn't look right, there are plenty more on the Web.

In a time of few resources I built one from 12-gauge solid copper house wire bent to make a 'J' shape. I soldered alligator clips to some coax and slid the feedpoints up and down to get a good match, then soldered the coax to the wire at those points. I had bent a 1/2" loop in the top to hang it from a nail in the attic, and it did well enough for 2M repeater and local packet work.

Dave

At 01:33 PM 7/15/2002 -0500, you wrote:

>I remember seeing instructions for making a quickie, 2m j-pole
>antenna (or perhaps also a quickie dipole?) out of 300 ohm
>television twin-lead. I looked in my ARRL handbook, antenna
>handbook, and a bunch of other books last night, and came up dry.
>Can anyone point me to the instructions (or email them)? My son
>wants to set up his 2m xcvr in his bedroom (instead of the
>basement ham shack, where all the antenna leads go), and I was
>looking for a quickie antenna he could hang out his window.
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>
>Steve Blatman (steve@inkspot.net)
>Ink Spot Printing & Copy Center, Inc.
>14 Church Road, Frazer, PA 19355 USA
>Tel: (610) 647-0776
>Fax: (610) 647-4560

"You can fool some of the people all of the time. That's enough to make a living." - Lance Burton

Dave Hinerman
WD8CIV@worldnet.att.net

Date: Mon, 15 Jul 2002 13:58:51 -0500 (EST)
From: <igeq100@iupui.edu>
To: QRP List <qrp-l@lehigh.edu>
Subject: [129801] An antenna question
Message-ID: <Pine.GS0.3.96.1020715134554.2671D-1000000@jade.iupui.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

I am seeking advice from the many antenna gurus who inhabit this list. I am currently building the PAC-12 antenna from the excellent article by James Bennett, KA5DVS, in the April 2002 (#8) QRP Homebrewer. At first I am going to build separate loading coils for each of the bands that I want to work. But I would like to make a loading coil that could be adjusted for all bands. The straightforward way would be to use coil taps and a switch, or to use a sliding contact. But since I don't always do things in a straightforward way, I am considering the possibility of slug-tuning the coil.

I would like to know the pro's and con's of this. I am sure that losses in the core would be a problem. Could this be helped by proper choice of core material? The biggest advantage that I can see to this approach is that it would be continuously variable without any contacts to fail or get noisy.

Any advice, including an admonition not to be so naive, would be appreciated.

Thanks in advance es 72,

Rich, WB9LPU

Date: Mon, 15 Jul 2002 12:20:14 -0700 (PDT)
From: Fred Bonavita <k5qlf@yahoo.com>
To: qrp-l@lehigh.edu
Subject: [129802] Wanted: RIT kit for SW-xx+ series
Message-ID: <20020715192014.27273.qmail@web21402.mail.yahoo.com>
MIME-Version: 1.0

Content-Type: text/plain; charset=us-ascii

Gang: I am looking for an RIT kit for the Small Wonder Labs
SW-xx+ series. Prefer unbuilt, but will consider one
already assembled. Even a spare SWL board will work.
Replies directly to k5qlf@yahoo.com and thanks.
73, Fred

Do You Yahoo!?

Yahoo! Autos - Get free new car price quotes
<http://autos.yahoo.com>

Date: Mon, 15 Jul 2002 15:23:52 -0400
From: "Walt Amos" <k8cv@netzero.net>
To: "Qrp-L Mail" <qrp-l@lehigh.edu>
Subject: [129803] Rocky Mountain Rock Mite and Tales of the Rail
Road
Message-ID: <001801c22c35\$28715500\$45293b41@waltamos>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

TenTec has given up on the ORION after one look at the MIGHTY ROCK MITE !

There will be a special parking lot sale of unopened ORIONS in the TenTec
parking lot featuring music by " DOLLY " and hotdogs by TenTec, come one,
come all, bring MONEY !

: -)

Introducing NetZero Long Distance
Unlimited Long Distance only \$29.95/ month!
Sign Up Today! www.netzerolongdistance.com

Date: Mon, 15 Jul 2002 13:25:38 -0600 (MDT)
From: "James P. Rybak" <jrybak@mesastate.edu>
To: qrp-l@lehigh.edu
Subject: [129804] Need Portable "Atomic" Clock
Message-ID: <Pine.LNX.4.21.0207151322520.15129-100000@mesastate.edu>
MIME-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

I'm looking for a reasonably small, battery operated "atomic" clock that will display UTC time in 24 hour format. I plan to take this on my QRP outings. Any suggestions?

Thanks.

Jim Rybak W0KSD

Date: Mon, 15 Jul 2002 14:34:16 -0500 (EST)
From: <igeq100@iupui.edu>
To: "James P. Rybak" <jrybak@mesastate.edu>
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [129805] Re: Need Portable "Atomic" Clock
Message-ID: <Pine.GS0.3.96.1020715143253.2671H-1000000@jade.iupui.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Jim -

I got one from MFJ at the Ft. Wayne Hamfest last year. At that time it wasn't in their catalog, but I think it is now.

72,

Rich, WB9LPU

On Mon, 15 Jul 2002, James P. Rybak wrote:

>
> I'm looking for a reasonably small, battery operated "atomic" clock that
> will display UTC time in 24 hour format. I plan to take this on my QRP
> outings. Any suggestions?
>
> Thanks.
>
> Jim Rybak W0KSD
>
>
>

Date: Mon, 15 Jul 2002 13:46:58 -0600
From: "Rod N0RC" <rod@n0rc.us>
To: <jrybak@mesastate.edu>,
"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [129806] Re: Need Portable "Atomic" Clock
Message-ID: <001101c22c38\$624bf110\$6501a8c0@greyrock>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Jim,

Check out: <http://www.radiocontrolledclock.com/> for a wide variety of
WWVB enabled clocks and watches. Many, many styles & sizes to choose
from.

73, Rod N0RC

----- Original Message -----

From: "James P. Rybak" <jrybak@mesastate.edu>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Monday, July 15, 2002 1:25 PM
Subject: Need Portable "Atomic" Clock

>
> I'm looking for a reasonably small, battery operated "atomic" clock
> that
> will display UTC time in 24 hour format. I plan to take this on my
> QRP
> outings. Any suggestions?
>
> Thanks.
>
> Jim Rybak W0KSD
>
>

Date: Mon, 15 Jul 2002 14:57:16 -0500
From: "Randall" <Firefox67501@cox.net>

To: <k8cv@netzero.net>,
"Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [129807] RE: Rocky Mountain Rock Mite and Tales of the Rail
Road
Message-ID: <MABBKDBHIJCIGDIMOHOBKEDMFFAA.Firefox67501@cox.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

But will there be Rock Mite's for sale there too ?.....

-----Original Message-----

From: owner-qrp-1@Lehigh.EDU [mailto:owner-qrp-1@Lehigh.EDU] On Behalf Of
Walt Amos
Sent: Monday, July 15, 2002 2:24 PM
To: Low Power Amateur Radio Discussion
Subject: Rocky Mountain Rock Mite and Tales of the Rail Road
.....

TenTec has given up on the ORION after one look at the MIGHTY ROCK MITE !

There will be a special parking lot sale of unopened ORIONS in the TenTec
parking lot featuring music by " DOLLY " and hotdogs by TenTec, come one,
come all, bring MONEY !

: -)

Introducing NetZero Long Distance
Unlimited Long Distance only \$29.95/ month!
Sign Up Today! www.netzerolongdistance.com

Date: Mon, 15 Jul 2002 14:57:18 -0500
From: "Gene Sailsbury" <gsailsbury@mobil1.net>
To: "Low Power" <qrp-1@lehigh.edu>
Subject: [129808] carrying case for 259B
Message-ID: <011a01c22c39\$d354c020\$9ae5fea9@mshome.net>
MIME-Version: 1.0
Content-Type: text/plain;

charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Does anyone know of a carrying case for the 259B other
then the one they now sell? I have one and am returning it because it is a
very poor design. Thanks.
Gene KC0IKY

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (<http://www.grisoft.com>).
Version: 6.0.372 / Virus Database: 207 - Release Date: 6/20/2002

Date: Mon, 15 Jul 2002 16:02:58 -0400
From: W2AGN <w2agn@w2agn.net>
To: Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>
Subject: [129809] Re: Rocky Mountain Rock Mite and Tales of the Rail
Road
Message-ID: <3D32F232.12463.C6C7A3@localhost>
MIME-version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT
Content-description: Mail message body

On 15 Jul 2002 at 15:23, Walt Amos wrote:

> TenTec has given up on the ORION after one look at the MIGHTY ROCK MITE !
>
> There will be a special parking lot sale of unopened ORIONS in the TenTec
> parking lot featuring music by " DOLLY " and hotdogs by TenTec, come one,
> come all, bring MONEY !

But the Rock Mite doesn't have BIG KNOBS!

--

/_ \ /_ \ /_ \ /_ \ /_ \ John L. Sielke
(W)(2)(A)(G)(N) <http://www.w2agn.net>
_ / _ / _ / _ / _ / ARCI, NJQRP, ARQrp, GQRP, RSGB
Ex- K3HLU, W7JEF, W4MPC, N4JS

Date: Mon, 15 Jul 2002 16:01:58 -0400
From: "Steve Lawrence" <Steve.Lawrence@itwfeg.com>
To: jrybak@mesastate.edu
Cc: qrp-1@lehigh.edu
Subject: [129810] Re: Need Portable "Atomic" Clock
Message-ID: <0FF366CD32.5F7D226B-0N85256BF7.006CEE5E-85256BF7.006E0AB8@itwfeg.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Jim,
After looking long and hard, I found a portable "atomic travel alarm" clock, capable of being set to UTC and 24 hour display format while here in the USA. The clock was found at a local Bass Pro Shop -- of all places. Very compact, about 2" x 3" x 1/2" or so. Folds up nicely upon itself. Powered by a single AA battery. Has a self contained stand, alarm.

As you shop, keep in mind a few problems I've seen:

- 1.) Not all clocks support 24 hour time
- 2.) Even fewer permit setting to GMT (UTC, Zulu, etc..... whatever it's called now)

The exact model I have, from another source is:

<http://www.atomic-clocks.com/lactecdigtra.html>

Of course this supports EST, CST, etc. but when I discovered it could be set to UTC, I purchased it on the spot!

73,
Steve
aa8af

"James P. Rybak" <jrybak@mesastate.edu>
Sent by: owner-qrp-1@Lehigh.EDU
07/15/2002 03:25 PM
Please respond to jrybak

To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
cc:
Subject: Need Portable "Atomic" Clock

I'm looking for a reasonably small, battery operated "atomic" clock that will display UTC time in 24 hour format. I plan to take this on my QRP outings. Any suggestions?

Thanks.

Jim Rybak W0KSD

Date: Mon, 15 Jul 2002 15:59:18 -0700
From: "Dave Benson" <nn1g@earthlink.net>
To: <Mark.Fancher@ae.ge.com>, <qrp-l@lehigh.edu>
Subject: [129811] Re: The Rock-Mite "L" Factor
Message-ID: <003e01c22c53\$41199ae0\$20e9d73f@pavilion>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Mark (and multitudes)-

I will post information on my website tomorrow :-)

73, Dave

Dave Benson, K1SWL
dave@smallwonderlabs.com
<http://smallwonderlabs.com>
Phone/fax 860-537-8031

-----Original Message-----

From: Fancher, Mark (GEAE) <Mark.Fancher@ae.ge.com>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Date: Monday, July 15, 2002 9:50 AM
Subject: RE: The Rock-Mite "L" Factor

Is there a web page reference to describe this rock-mite?

Date: Mon, 15 Jul 2002 10:38:13 -0400
From: Steven Weber <kd1jv@moose.ncia.net>
To: harold.smith1@worldnet.att.net
Cc: qrp-l@lehigh.edu
Subject: [129812] Re: another schematic capture question
Message-ID: <3.0.6.32.20020715103813.007a1d80@mailhost.ncia.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

>Does anyone know of a schematic capture program that can generate legible
>output in a format that can be directly pasted into a Word or similar
>document?

>
Circad 98 (<http://www.holophase.com>) also allows outputing in BMP
formate. The web page html program I use (corel) then converts it to a GIF
when insterted into a html document as an image.

I know Trev likes Egale, but I found that program clumsy and hard to use
(in fact drove me 'friggin nuts) as compared to Circad. (Circad is a free
down load too)

72,
Steve, KD1JV
"Melt Solder"
White Mountains of New Hampshire
<http://www.qsl.net/kd1jv/>

Date: Mon, 15 Jul 2002 16:11:25 -0400
From: Steven Weber <kd1jv@moose.ncia.net>
To: qrp-l@lehigh.edu
Subject: [129813] AAPB - smt practice kit II?
Message-ID: <3.0.6.32.20020715161125.00799990@mailhost.ncia.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

The AAPB - Analog Audio processor board.

Adds automatic volume limiting, two stages of 700 Hz band pass filtering
and low impedance headphone or small 8 ohm speaker drive. All on a little
1.7" x 1.8" board, using SMT parts.

I built this to use with my little "Rock Mite" which frankly needs some
help in the selectivity department. While I was at it, I decided to add the

electro-optical automatic volume limiting circuit and a nice head phone/speaker driver amp, with 250 mw of rms drive into a 8 ohm load. All built around a single TL-084 quad op amp. It really does a good job. It's also an ideal companion for other simple receivers, which frankly, could use a little help.

I have the circuit and discription (but no photo of the finished board yet) up on my web page. It's simple enough to build and uses common parts for those of you who might like to scratch build it. Here's the direct link

<http://www.qsl.net/kd1jv/aapb.HTM>

Or you can get to it from the main index page if I made the usual typo in that link :-)

Given the popularity of the 555 smt keyer kit, I figure this would also make a nice smt practice kit. I figure I can do them for \$20.00, plus \$1.50 postage. Let me know if you'd be interested and would like to reserve a kit and if there is enough interest (silly question) we'll get on it :-)

72,
Steve, KD1JV
"Melt Solder"
White Mountains of New Hampshire
<http://www.qsl.net/kd1jv/>

Date: Mon, 15 Jul 2002 14:39:04 -0600 (MDT)
From: "Karl F. Larsen" <k5di@zianet.com>
To: "James P. Rybak" <jrybak@mesastate.edu>
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [129814] Re: Need Portable "Atomic" Clock
Message-ID: <Pine.LNX.4.44.0207151436550.3245-100000@Daisy.dog>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi James, goto Wal Mart and buy a 25 dollar sweep hand watch. Then when on an outing get WWV on the radio and set the watch to that in UTC.

On Mon, 15 Jul 2002, James P. Rybak wrote:

>
> I'm looking for a reasonably small, battery operated "atomic" clock that
> will display UTC time in 24 hour format. I plan to take this on my QRP
> outings. Any suggestions?

>
> Thanks.
>
> Jim Rybak WOKSD
>
>

--
Yours Truly,

- Karl F. Larsen, (505) 524-3303 -

Date: Mon, 15 Jul 2002 16:34:24 -0400
From: David Hinerman <WD8CIV@worldnet.att.net>
To: qrp-l@lehigh.edu
Subject: [129815] Re: The Rock-Mite "L" Factor
Message-ID: <5.1.0.14.1.20020715162810.00a76100@ipostoffice.worldnet.att.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Folks,

Here's a little service I use to keep an eye on Web pages and notify me if they've changed:

<http://www.watchit.us/index.php>

I use it to keep tabs on Norcal's and NJQRP's sites, as well as my own (in case a vandal strikes). You sign up for the service and list individual pages you want watched (it's not a crawler, you have to list multiple pages on a single domain separately). It polls each page once per day and e-mails you when it detects a change from the previous day. Multiple changed pages are reported in a single e-mail, so you don't get 18 e-mails when 18 pages change.

It's just the thing when waiting for kit announcements (Grin).

Dave

At 03:59 PM 7/15/2002 -0700, you wrote:

>Mark (and multitudes)-
>
>I will post information on my website tomorrow :-)
>

>73, Dave
>
>*****
>Dave Benson, K1SWL
>dave@smallwonderlabs.com
>http://smallwonderlabs.com
>Phone/fax 860-537-8031
>*****
>-----Original Message-----
>From: Fancher, Mark (GEAE) <Mark.Fancher@ae.ge.com>
>To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
>Date: Monday, July 15, 2002 9:50 AM
>Subject: RE: The Rock-Mite "L" Factor
>
>
>Is there a web page reference to describe this rock-mite?

"You can fool some of the people all of the time. That's enough to make a
living." - Lance Burton

Dave Hinerman
WD8CIV@worldnet.att.net

Date: Mon, 15 Jul 2002 17:30:53 -0400
From: Ed Tanton <n4xy@earthlink.net>
To: QRP-L Reflector <qrp-l@lehigh.edu>
Subject: [129816] Fwd: WWV-Message
Message-ID: <5.1.1.6.2.20020715173005.00afe900@pop.earthlink.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

>Date: Mon, 15 Jul 2002 21:15:01 GMT
>From: Space Environment Center <sec@sec.noaa.gov>
>To: wwv-list-send@dawn.sec.noaa.gov
>Subject: WWV-Message
>Sender: sec@sec.noaa.gov
>Reply-To: sec@sec.noaa.gov
>
>:Product: Geophysical Alert Message wwv.txt
>:Issued: 2002 Jul 15 2115 UTC
># Prepared by the US Dept. of Commerce, NOAA, Space Environment Center
>#

># Geophysical Alert Message
>#
>Solar-terrestrial indices for 15 July follow.
>Solar flux 160 and estimated mid-latitude A-Index 4.
>The mid-latitude K-index at 2100 UTC on 15 July was 2 (11 nT).
>
>Space weather for the past 24 hours has been strong.
>Radio blackouts reaching the R3 level occurred.
>
>Space weather for the next 24 hours is expected to be minor.
>Solar radiation storms reaching the S1 level are expected.
>Radio blackouts reaching the R1 level are expected.

72/73 Ed Tanton N4XY <n4xy@earthlink.net>

Ed Tanton N4XY
189 Pioneer Trail
Marietta, GA 30068-3466

website: <http://www.n4xy.com>

All emails <IN> & <OUT> checked by
Norton AntiVirus with AutoProtect

LM: ARRL QCWA AMSAT & INDEXA;
SEDXC NCDXA GACW QRP-ARCI
OK-QRP QRP-L #758 K2 (FT) #00057

Date: Mon, 15 Jul 2002 17:39:06 -0400
From: lenny wintfeld <w2bvh@comcast.net>
To: WD8CIV@worldnet.att.net,
"[Low Power Amateur Radio Discussion]" <qrp-l@lehigh.edu>
Subject: [129817] Re: Is direct conversion fm a contradiction in terms?
Message-ID: <3D3340FA.DDB6F3E2@comcast.net>
MIME-version: 1.0
Content-type: text/plain; charset=us-ascii
Content-transfer-encoding: 7BIT

David Hinerman wrote:

> At 08:20 PM 7/14/2002 -0400, you wrote:
> >Is it possible to detect fm at baseband? Is it practical?

> >

> >

73,

> >

> >

Lenny W2BVH

>

> Lenny,

>

> Yes, it's possible, but most FM detectors don't provide any selectivity to
> speak of. The quadrature detector, which is one of the most inexpensive and
> common FM detectors in consumer FM receivers, provides little selectivity.
> The control voltage of a PLL locked to an input signal will follow any
> frequency modulation, but it's not all that selective either. Both of these
> benefit from prior filtering and amplification (and limiting).

>

> Making a tunable amplifier chain with good enough selectivity for most
> radio applications is a real challenge. That's why superhets are more
> common. For a single-frequency receiver it might be feasible, though.

>

> Have you got something in mind?

Hi Dave,

Yes I did have something in mind but the "gedanken experiment", I had in mind probably fits the category of "hare brained" (not Ed Hare brained that's an entirely different category -- hi). I've never operated UHF, and am not sure if I really would like it. So rather than go about things in the conventional way, and buy a used 70cm rig, and see what I think of UHF, I did the next to the next to the next best thing, and picked up a couple of radiosondes (\$2.50 each at the SCARC hamfest yesterday).

The radiosondes have a 403 MHz transmitter that puts out a few hundred milliwatts. It's fm modulated by the temperature, humidity and barometric sensors on board, as well as by the output of an ELF receiver that it has on board.

I figured first on tracing the circuit of the transmitter (I've got no documentation), and eventually clipping a turn or 2 on a coil or 2 to get to the simplex channel of the 70 cm band (there is a simplex frequency set aside on 70 cm, isn't there?). And then finding where to put the audio in for fm'ing it.

Well this led to the idea of connecting the transmitter output to the LO input of an SBL1 (through a pad) and putting about 90db of audio gain on the output of the SBL1. At that point I realized I was going off the deep end (again). It seems to happen a couple of times a month. And before I dropped the whole idea, I figured I might as well ask about detecting the resulting multiple sideband pairs at baseband. If it was cheap AND easy, I'd give it a try. (I'd end up with a single channel simplex rig for about the cost of a Friday night

trip to the 12-plex (or is it google-plex) with the xyl.

So far the jury is out. I could do it with DSP, if I knew how, which I don't. Or maybe with a PLL, but I await further comments on THAT from the group. And finally, I'm not sure if it's possible to make 90 or so db of gain without making an inadvertent oscillator (I've yet to make an LM386 gain block that doesn't make some weirdness on its output!). (Maybe put 20 db rf gain (a bit harder to make) and a filter at the input to the SBL1, then 70 db of audio gain.....)

I think I'll await further advice before doing something dumb, like trying to build something up or doing something smart, like letting it go until the next delusion hits.

73,

Lenny W2BVH

Date: Mon, 15 Jul 2002 18:00:33 -0400 (EDT)
From: Chris Cartwright <ccart@phideaux.com>
To: QRPL List <qrp-l@lehigh.edu>
Subject: [129818] Baygen Free-Play clone \$20
Message-ID: <Pine.LNX.4.33.0207151751300.22695-100000@dns.phideaux.com.>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Just got the new Northern Tool catalog (www.northerntool.com - 800-533-5545) and it lists a shortwave radio with a handcrank, solar cell, and 3 AA NiMH's for \$19.99. Can't find it on their website anywhere, but the part# in the catalog is 160225-C170. There was some interest in "crank powered" QRP sometime ago, and for \$20 this might be worth carvin' up.

No financial interest, yada, yada,

-- Chris Cartwright, Unix Administrator | ccart@phideaux.com --
-- N3XRV ARRL-VE Norcal Zombie #163 | Oxford, PA 19363 FM29as --
-- MDmW #5 NJ-QRP #105 QRP-L #655 NORCAL #1891 FISTS #5028 QRP-ARCI #9271 --

Date: Mon, 15 Jul 2002 17:27:15 -0500
From: Lew Paceley <lew@paceley.com>
To: Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>
Cc: steve@inkspot.net
Subject: [129819] Re: twin-lead J-pole?
Message-ID: <000f01c22c4e\$c61177e0\$6501a8c0@swbell.net>
MIME-version: 1.0
Content-type: text/plain; charset=Windows-1252
Content-transfer-encoding: 7BIT

Hi Steve,
You've gotten a couple suggestions...here's a few more, both homebrew
and commercial. I haven't used any of the commercial products so
caveat emptor:

Homebrew:
<http://kg8ih.cit.cwru.edu/w8edu/projects/j-pole;lines=1-62>

<http://www.qsl.net/wb8erj/146jpole.htm>

Commercial:
<http://www.ilinkradio.com/antenna.html>

<http://www.arrowantennas.com/j-pole.html>

My 2m antenna for the house is currently an L pole...basically a
j-pole with the bottom and side of the "j" removed and the 1/4 wave
matching section extended to a 9/4 wave. In simpler terms, it's just a
1/2 wave vertical (~3 foot) of copper tubing fed with twinlead.

I decided to feed the 1/2 wave radiator with twinlead since I could
squish (technically speaking :-) the twinlead between the window and
sash. Saved drilling a hole in the side of the house. The one
negative is that the twinlead is sensitive to moisture as others have
explained.

GL!

72/73,
Lew
N5ZE

Date: Mon, 15 Jul 2002 15:33:06 -0700
From: Wayne Burdick <n6kr@elecraft.com>
To: Elecraft <elecraft@mailman.qth.net>
Cc: qrp <qrp-1@lehigh.edu>
Subject: [129820] K2 update: 60 meters and low-level transverter I/O
Message-ID: <3D334DA2.F056086D@elecraft.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

A brief update from the Elecraft lab....

60 Meters

It looks like U.S. hams will soon be getting a new band at 60 meters (5.25-5.45 MHz). Our best estimate of when this will happen is 6 months to 1 year. In anticipation of this, we've just completed final lab tests of a modified K2 that covers 60 meters. (In addition to full transceive coverage of the proposed band, the rig can tune in WWV on 5 MHz.) The rig works perfectly on this band, and only minimal changes are required. A small daughter board is needed to switch in trim caps that resonate the 40-meter band-pass filter, and new firmware is needed to handle changes in VCO and filter relay switching.

Once the new band is opened up--maybe even before--we'll be offering a new K2 option: the K60X. The K60X kit will include a small PCB that plugs into the K2 RF board at the Transverter I/O option connector. All needed new firmware will also be included.

At least one K2 owner has an experimental 60-meter license, and he's agreed to build the first K60X kit so he can begin on-air testing. We'll try to post his operating times so that those of you with general-coverage receivers can listen for him.

Transverter I/O

In addition to 60 meters, the K60X will add another feature that K2 owners have asked for: low-level RF output and separate, diode-switched RX/TX paths for use with transverters. The transmit output power will be nominally 0 dBm (1 milliwatt into 50 ohms), but with considerable adjustment range, controllable via the POWER knob on the front panel or via a direct menu setting. You'll be able to select either low- or high-level transmit output on a per-transverter-band basis. When low-level output is selected, the K2's high-power transmit strip will be completely disabled. This is important for installations with two or more transceivers using the same I.F.

Connectors and coax will be supplied for the RX/TX connections. The

builder will have their choice of using the pre-drilled and labeled "XVTR I/O" jacks on the original K2 top cover, or installing the jacks on the lower rear panel/heatsink. The latter will allow the transverter jacks to be used with the KPA100 (100-W option) installed.

We hope that these two new features will be a welcome addition to the K2. Price and availability of the K60X will be announced later.

Please send any questions about this kit to n6kr@elecraft.com.

73,
Wayne, N6KR
Eric, WA6HHQ

Date: Tue, 16 Jul 2002 02:20:00 +0400
From: "Oleg V. Borodin" <master72@lipetsk.ru>
To: <QRPP-I@yahoogroups.com>, "QRP-L" <qrp-l@lehigh.edu>
Subject: [129821] Micro-80 trcvr kits
Message-ID: <008701c22c4f\$170f1c60\$dce422c3@user.lipetsk.ru>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="koi8-r"
Content-Transfer-Encoding: 7bit

Dear friends!

Sorry, but I physically can not answer for everybody at once :-)
I receive about a hundred orders for Micro-80 kits, it's beautifull! Don't worry, I will send the kits for all Amateurs who ordered it. I will inform everybody the day when I send the parcel for him. Also, almost everybody ask me about info for transfer a money. That is very pleasure, many thanks! My US\$ account info:

SWIFT code - SABRRUMM VH1
SAVINGS BANK OF THE RUSSIAN FEDERATION
LIPETSK OFFICE, LIPETSK BANK 8593/060
OLEG V. BORODIN
ACC. NR. 42301 840 2 3516 8100161 01

I'll be send the kits at first turn for everybody who paying already.
I'm happy to find so many friends! See you at AGCW-DL Summer QRP Contest!
72! de RV3GM/QRP Oleg V.B.

Date: Mon, 15 Jul 2002 22:03:40 GMT
From: na5n@zianet.com
To: qrp-1@lehigh.edu
Cc: qrp-canada@gpfn.sk.ca, inforhc@ip.etc.ca
Subject: [129822] Major X3 Flare 7-15
Message-ID: <20020715220341.11166.qmail@zianet.com>
Mime-version: 1.0
Content-type: text/plain; charset="us-ascii"

Gang,

A major X3 flare occurred Monday afternoon at 2000UTC 15JUL 2002. The flare originated from Region 30, which is located right smack on the sun's central meridian. This means the resultant shock wave will hit the earth in about 2 days fairly directly, triggering a minor to major geomagnetic storm. As of this writing, NOAA has confirmed there was an associated CME (coronal mass ejection), a Type III sweep (indicating a strong shockwave), but has not yet released the measured velocity of the shockwave. If it is above about 750 km/sec., an extreme geomagnetic storm in 2 days or less is possible.

RIGHT NOW ... the earth is still being hit from the high velocity radiation causing an R3 radio blackout. It is now subsiding in the eastern portion of North and South America, with communications above 15MHz starting to open back up. In the Western US and Canada, it is nearly a total HF blackout, which will persist until around sundown. This is effecting frequencies up to about 25MHz ... that is, extremely high D-layer absorption that is highly attenuating all HF signals up to about 25MHz, producing a near total HF blackout in the western U.S.

The good news, is this may cause a sudden increase in the solar flux for tomorrow, allowing good DX communications on 15M and 10M, sadly lacking in recent days.

The bad news ... the shockwave from today's flare will strike the earth sometime Wednesday (probably mid-morning or so), triggering many hours of geomagnetic storming. If a major to extreme geomagnetic storm, this will make HF communications very difficult from extremely elevated noise levels. But if an extreme geomagnetic storm, this will also trigger aurora that may be seen in middle latitudes. Details on this part as further data becomes available and when the shockwave is due to arrive Wednesday, and I will post the info at that time.

The ideal situation would be for the shockwave to arrive at planet earth about 10pm-midnight EDT, allowing the shockwave and solar wind to blow the aurora right over the poles and the most southward trek over the U.S.

Tonight and tuesday, HF propagation should be quite good, owing to the fact that the solar radiation storm portion of the flare will be over and the geomagnetic field is currently very quiet, and will remain so until the shockwave arrives wednesday.

72, Paul NA5N

End of QRP-L Digest 2617

